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Economics and Statistics Administration  
BUREAU OF THE CENSUS

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1990 Census of  
Population and Housing

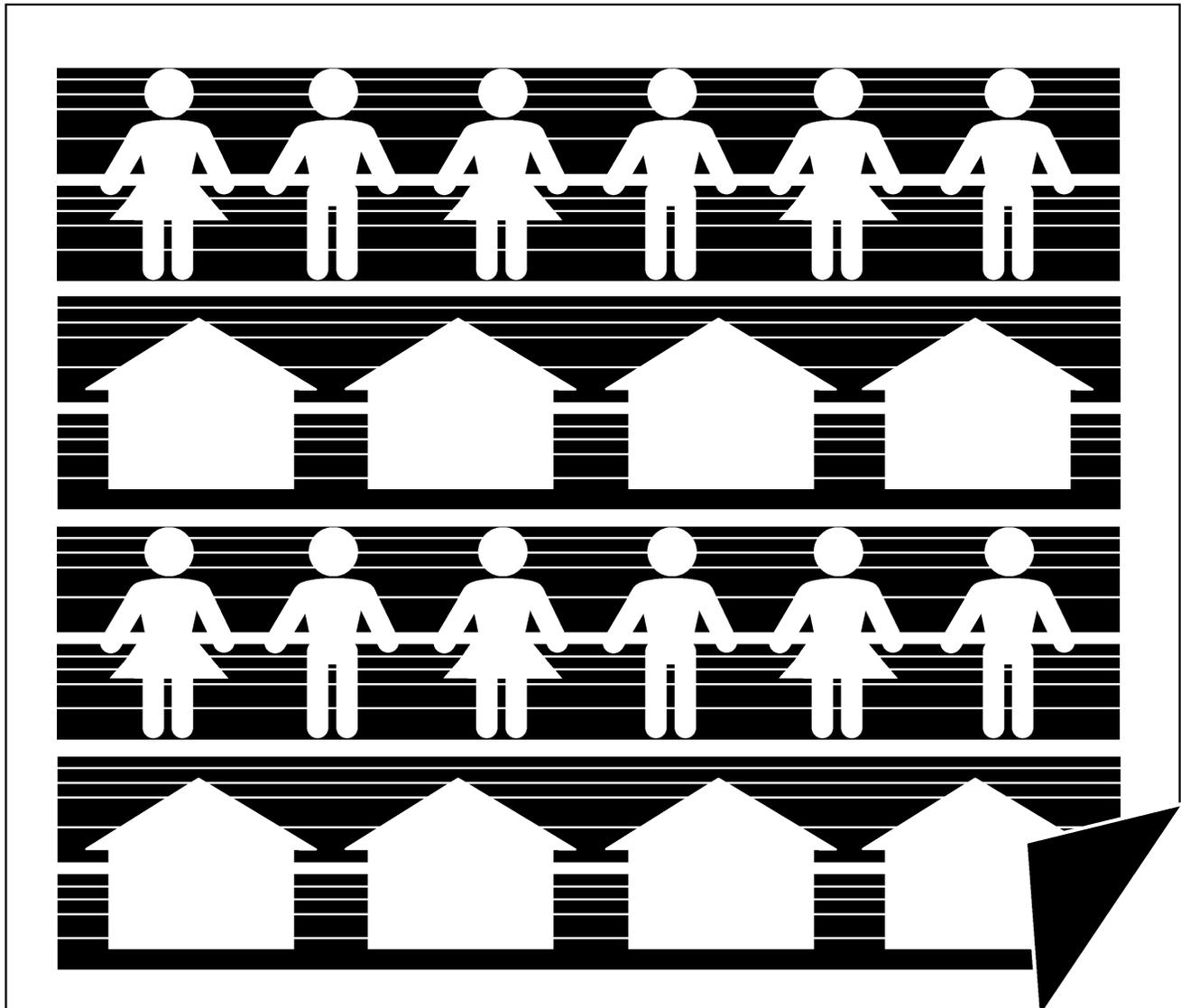
CENSUS '90



# Guide

## Part A. Text

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# ACKNOWLEDGMENTS

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The Technical Services Division, **C. Thomas DiNenna**, Chief, designed, developed, deployed, and produced automated technology for census data processing.

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# THE GUIDE AND HOW TO USE IT

## WHAT THE GUIDE COVERS

Through the *1990 Census of Population and Housing Guide*, the Census Bureau seeks to provide a thorough and helpful reference for the users of 1990 data. The agency is issuing the *Guide* in three parts. This one—Part A. Text—deals with such topics as questions asked in the census, data products available to users, and assistance offered by the Census Bureau and other organizations. It furnishes the information a user needs to determine the types of data presented and areas for which statistics are reported. It also discusses basic technical considerations relating to machine-readable products and provides the user with a practical understanding of the data.

The other parts of the *Guide*, being issued following Part A, will be:

- Part B. Glossary—A comprehensive listing of the definitions of population, housing, geographic, and technical terms associated with the census.
- Part C. Index to Summary Tape Files 1 to 4—An integrated, alphabetical index to the data found in the four 1990 census summary tape files.

The *Guide*, with its three parts, is similar in design and content to the *1980 Census of Population and Housing Users' Guide*. The Census Bureau retained the 1980 approach because of the high proportion of favorable comments from users during the 1980's. For information about the status of Parts B and C, contact the Data Access and Use Branch, Data User Services Division (DUSD), Bureau of the Census, Washington, DC 20233-8300; 301-763-1584.

The Census Bureau also is issuing related publications to meet additional needs. For users of data on tape and CD-ROM, Customer Services (address and phone number below) offers technical documentation for the machine-readable files. Instructional materials for classroom use in elementary and secondary schools are available from the Training, Education, and Marketing Staff (TEAMS) of DUSD. The phone number is 301-763-1510.

*Census and You*, the Bureau's monthly newsletter, covers new developments in the 1990 census, other censuses and surveys, software, user services, and related activities. The Government Printing Office handles the sale of *Census and You*, and a subscription form is found at the

end of this volume. Users can also obtain the *Monthly Product Announcement*, which lists all new reports, tapes, CD-ROM's, maps, and other products issued by the Census Bureau. To subscribe to this free publication, contact Customer Services, Bureau of the Census, Washington, DC 20233-8300; 301-763-4100.

The Census Bureau welcomes questions and comments on the *Guide*, the programs and procedures it describes, and other aspects of the 1990 census. Letters may be directed to the Chief, Data User Services Division, Bureau of the Census, Washington, DC 20233-8300.

## HOW TO USE THE GUIDE

### To Understand the Census

To proceed easily from an overview to details of the census, readers should understand the structure of Part A of the *Guide*. After introducing the census in chapter 1, the *Guide* examines the questionnaire—its population and housing contents (ch. 2), as well as its distribution, collection, and processing (ch. 3). The *Guide* then defines the geographic areas reported in the census and describes such products as maps and geographic code schemes (ch. 4). The *Guide* also discusses the data products—publications, computer tapes, CD-ROM's, microfiche, and others—and shows how to obtain them (ch. 5). The final chapters describe important considerations in using statistics (ch. 6) and explain where to turn for assistance and additional information (ch. 7).

### For Reference

Since the index cites subjects in considerable detail, begin each search with the most specific term.

For definitions, a glossary of population, housing, geographic, and technical terms will be issued as Part B of this *Guide*. The appendixes of 1990 census reports and technical documentation also are convenient sources of many of these definitions.

In addition, this volume often provides brief definitions and sometimes information that supplements the glossary. For example, chapter 2 clarifies population and housing terms with its discussion of the questions asked and its facsimile of the questionnaire and instruction booklet.

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**Please Note**

Some of the data products and maps described in this *Guide* are *planned*, not prepared, at the time of publication. Any changes will be reported in *Census and You*, the Census Bureau's newsletter.

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# CHAPTER 1. Fundamentals

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## THE CENSUS SINCE 1790

The U.S. decennial census is almost as old as the Nation itself. The 1990 census marks the bicentennial of national census taking in our country. Federal marshals began taking the first national census in August 1790, a little over a year after final ratification of the Constitution. Not much more than a year before, George Washington had been inaugurated President, and Congress had assembled for the first time under the Constitution. Thomas Jefferson, who as Secretary of State was responsible for the census, arrived in the new capital (New York City) barely in time to issue instructions to the marshals.

The first census produced only separate counts for White males aged 16 years and over, White males under 16, free White females, all other free persons (including any Indians who paid taxes), and slaves. Compared with modern censuses, the census of 1790 was a crude operation; data collection took 18 months. The law required that the returns be made in a specified form, but the enumerators (U.S. marshals and their assistants) had to furnish their own pens and paper. They used paper of all sorts and sizes to record the information.

Why has there been a census every decade for 200 years? The answer to this question is entwined with the representative nature of our Government. A compromise between large and small States at the Constitutional Convention gave the States equal representation in the Senate but linked representation in the House to population size. To apportion representatives fairly among the States, article I, section 2 of the Constitution calls for an enumeration of the population at least every 10 years. This is the origin of the census. Even in the first census, though, there was interest in the data for other purposes—the age categories noted above were associated with assessing the Nation’s industrial and military potential.

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*If we could first know where we are, and whither we are tending, we could better judge what to do, and how to do it.*

ABRAHAM LINCOLN

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Today the country has additional important requirements for census data. The “one person, one vote” Supreme Court decisions of the 1960’s and later, which require the congressional districts within a State (as well as the State and local legislative districts) to be of nearly equal population, added a new demand for small-area census data. The allocation of Federal and State funds among the 39,000 local governments also depends, to a certain extent, on census figures. In addition, social and economic statistics assist marketing studies; academic research; Federal, State, and local planning; affirmative action programs; and many other activities. Finally, the people of the United States need information from the census about their community, State, and Nation.

The Bureau of the Census, an agency within the Department of Commerce, carries out the decennial census of population and housing. Title 13 of the United States Code authorizes the decennial census, outlines its timing and scope, makes compliance mandatory, and sets the penalties for disclosing confidential information.

The 1990 Census of Population and Housing was the 21st decennial census. It encompassed the United States, Puerto Rico, the Virgin Islands of the United States, and the Pacific territories over which the United States had jurisdiction. The design and content of the questionnaires and the collection methods were tailored to meet the requirements of these diverse areas.

The Census Bureau attempted to count all persons who were residents, including Americans temporarily traveling abroad. The census did not include citizens of other countries temporarily visiting in the United States and persons living on the grounds of foreign embassies, chancelleries, and other such facilities considered to be legally on foreign soil.

Also, the Census Bureau reported counts of persons living abroad who were civilian Federal employees, U.S. military personnel, and their dependents; the counts were obtained from U.S. Government administrative records.

## TWO CENTURIES SEE CENSUS CHANGES

For 200 years, then, the Nation has been counting its people and recording their characteristics. The resident population has increased dramatically from 3.9 million in 1790 to 248.7 million in 1990. During this period, the decennial census, with its roots in the U.S. Constitution, has changed dramatically also. No two censuses have been exactly alike, and the decade-to-decade changes in their content reflect changes in our society, economy, and technology.

Over the years, census-taking has changed in almost every aspect: who conducts the census, types and number of questions asked, methods of enumeration, techniques for processing the data, policies regarding the confidentiality of information about individuals, and channels for disseminating the results. There has not always been an ongoing Census Bureau with responsibility for the census. Early counts were accomplished by staffs set up for each census and disbanded after completing the enumeration and publishing the results. Some observers in the latter part of the 19th century noted that, because of their ad hoc nature, early censuses were inadequate in several respects. There was a lack of continuity and experience in census work. The enumerations also had to be organized in great haste. The accuracy of the statistics was impaired.

The State Department and the Interior Department were responsible for the census during the periods 1790-1840 and 1850-1900, respectively. Based on recommendations resulting from studies by governmental and professional associations, pressure for the creation of a permanent organization mounted during the 1880's and 1890's. In 1902, Congress established a permanent census organization in the Department of the Interior. From 1903 to 1913, the Census Bureau was in the Department of Labor and Commerce. Since 1913, it has been part of the Department of Commerce.

The questions asked in the census also have changed over the years. Simple head counts of free persons and slaves would have met the constitutional requirement for apportionment data, but even the first census went beyond that. It asked for the name of the "head of the family" and certain individual characteristics, as noted earlier.

During the 19th century, in response to the growth of the Nation and the developing need for statistics for planning and legislative decisionmaking, the number of questions asked in the decennial census steadily increased. In 1870, the census asked 15 questions on topics such as literacy, value of real estate owned, and occupation.

In addition to the new population questions added during the 19th century, the censuses also asked, at various times, for information on manufactures, agriculture, mining, and fisheries. Eventually, these and other economic subjects were addressed in censuses and surveys separate from the population census.

Census subjects have been added or deleted according to the country's needs. For example, the Census Bureau replaced a question on literacy, first asked in 1840, with one on educational attainment in 1940 because illiteracy had substantially declined. In the 20th century, major additions have included questions on personal income and housing.

The ways of conducting and processing the census also have changed over the years. In 1880, supervisors and enumerators hired specifically for the census replaced the Federal marshals. In 1890, the Census Bureau first used punchcards and mechanical tabulating machines. Designed by Herman Hollerith, who had been a "special agent" in the 1880 census, these machines foreshadowed the electronic computer, tallying results far more quickly than could be done by hand.

Sampling was first used in the 1940 census. Sampling techniques allowed the Census Bureau to reduce the burden on respondents and to hold down costs while continuing to ask a broad array of social and economic questions. By 1960, most questions were asked of a sample of households. Only a limited set of population and housing questions continued to be asked on a 100-percent basis. Those questions were ones needed to meet the constitutional mandate of an enumeration of all persons and to provide key data for very small areas, such as small governmental units and census blocks.

The development of the computer also has been of great importance for the census. In the 1940's, the Census

picked them up. In some rural sections, census enumerators delivered the forms, and residents were asked to complete them and mail them back.

An important advance for the 1990 census was the creation of the automated geographic data base, known as the Topologically Integrated Geographic Encoding and Referencing (TIGER) System, which allows the Census Bureau to computer-generate various geographic products to support the 1990 census. The TIGER System has significantly improved the accuracy, consistency, and timeliness of 1990 census maps and geographic reference products, compared with those of the 1980 census. Among its accomplishments, the TIGER System has been used to generate individual maps for over 300,000 separate enumerator assignment areas and 39,000 governmental units, displaying the names and boundaries of most data collection and tabulation areas.

## IMPORTANT CONTINUING OBJECTIVES

Though census techniques change, the Census Bureau's aims are far from new—

- To prepare accurate statistics in response to the Nation's changing needs;
- To keep information about individuals confidential;
- To balance the Government's and public's need for facts against the burden of responding;
- To tabulate and publish census results as soon as possible.

### Accuracy of the Count

A principal objective of the Census Bureau is the accuracy of the final product of the census—the data—a public concern since 1790. President Washington thought that the first enumeration undercounted the Nation's population, and complaints have persisted over the decades. Public interest in census accuracy has grown since the 1960's, largely due to the Supreme Court's one-person/one-vote rulings and the allocation of increased Federal funding based in part on census data.

For the 1990 census, the Census Bureau took a number of steps aimed at improving the accuracy of the 1990 census. These included earlier planning; increased and more targeted promotion; greater cooperation with local governments; efforts to increase the mail response; revised census procedures; improved enumerator training, pay, and management; and greater automation. It also conducted the largest evaluation program ever undertaken by

Bureau helped sponsor the construction of the first computer designed for large-scale data processing; that computer helped tabulate the 1950 census. But it was not until the late 1950's that an optical-scanning system was developed that could transfer information rapidly and accurately from the questionnaires to computer tape. After that development, the computer could be used much more effectively in census processing. The 1960 census was the first to be tabulated completely by computer.

Other major improvements in census-taking include the use of self-enumeration methods in 1960 and of a mail-enumeration system for three-fifths of the population in 1970. Using mail enumeration, the Census Bureau sends preaddressed questionnaires directly to housing units, and residents are asked to complete them and mail them back. Tests during the 1970 census proved it was practical to extend the mailout/mailback method, and in 1980 and 1990 this method was used as the basic procedure for enumerating 95 percent of the population. In some areas that primarily had seasonal housing or were sparsely settled, the U.S. Postal Service delivered unaddressed census questionnaires to households, and census workers

the Census Bureau to measure the coverage of the census and to evaluate the coverage-measurement program.

## Keeping Records Confidential

Maintaining the confidentiality of census information, an important issue since the late 1800's, was a high priority for the 1990 census. In the early censuses, Federal marshals were instructed to post enumeration sheets containing information about individuals in public places so that the people could make sure they had been counted correctly. By the latter part of the 19th century, the Government had halted this practice and prescribed penalties for enumerators who revealed information about individuals, their households, or their places of residence. Beginning in 1910, Presidential proclamations announcing the census stated that facts about individuals would be kept confidential, a promise that was made part of the census law in 1929. In 1954, Congress brought all the laws governing the Census Bureau's operations together in Title 13, United States Code.

Census officials today are more aware than ever of the importance of confidentiality in taking the census. A census in a democracy that values personal privacy requires special steps to gain cooperation; the Census Bureau must ensure that confidentiality is not breached. Any Census Bureau employee who reveals information to unauthorized people is subject to fines and imprisonment. After a 72-year period of confidentiality has passed, the National Archives and Records Administration makes the records available for genealogical and other research.

The Census Bureau microfilms the decennial census questionnaires and processes them by optical-scanning machines and, for some of the information, keyboard entry. The information is then fed into the Census Bureau's computers and stored on magnetic tape. The optical scanners cannot "read" names or addresses; they read only coded geographic information and responses to questions answered by darkening circles, so the records on computer tape do not include names and addresses.

The statistics prepared from the questionnaire responses are carefully reviewed, primarily by computer. Statistics from the 1990 census that could reveal information about individuals or their households and homes undergo a "confidentiality edit" (described in ch. 6) to ensure that confidentiality is preserved.

After processing is completed, the original questionnaires are destroyed. Microfilm copies with names are stored under tight security. The Census Bureau keeps these records (organized by geographic area and not alphabetized by name). Individuals, their heirs, or their legal representatives may obtain transcripts of past census returns where the individual's responses are recorded. The individual's census information cannot be used to the detriment of the individual or for purposes of taxation, investigation, or regulation. Many individuals use transcripts, providing information about themselves from previous censuses, to qualify for Social Security or retirement

benefits, obtain passports, prove family relationships, or resolve other situations when a birth certificate may be needed but is not available.

## The Burden of Responding

Another question related to confidentiality comes up before every census: What does the Federal Government need to know? This question received increased attention during the late 1800's as the content of the census grew, and discussions continue with each census. For the 1990 census, the Census Bureau worked hard to avoid increasing the response burden for any household. Overall, the number of questions the average household had to answer in 1990 was about the same as in 1980.

The Census Bureau must select carefully from those questions used in the last census and the hundreds suggested since then, mainly to limit the burden on respondents. It also must consider processing complexities, the cost of collecting the data, the ability to meet the legal requirements for data used for apportionment and redistricting, and so forth. The questions selected must be submitted to Congress for review and approval.

## Timely Dissemination

Another goal of the 1990 census is to provide the data as quickly as possible. The Census Bureau does extensive editing and review to help ensure accuracy. At the same time, it has consistently released 1990 census data files and other products earlier than comparable 1980 census products were released.

## FACTFINDING AND DATA DELIVERY

Counting the population still is the primary purpose of the decennial census. Population figures and other data are the end product of the years of planning, the millions of dollars spent, and the public cooperation that go into a census. These data provide information for achieving representative government; for government, community, and business planning; and for the many other needs of an ever-growing number of data users.

The Census Bureau is delivering more data than ever before, in terms of both cross tabulations and geographic detail. It also is making the data available through a greater variety of media, giving users more flexibility and, for many, access to data not readily available to them from previous censuses. It also directly assists users and actively supports assistance efforts by others.

The growth in the number of pages in population and housing publications for the decennial census reflects the increasing interest in census facts. A slender volume of 56 pages summed up the results of the census of 1790. The printed reports from the 1980 census contained about 380,000 pages, and plans are to publish more in 1990 census reports.

Print has been a major method of presenting census data since 1790 and will continue to be so for 1990. User comments at local public meetings and other gatherings indicated that most census data needs are best met by printed reports.

Decennial census data have been available on computer tapes since the 1960 census and on microform since the 1970 census. The Census Bureau tabulates much more data than it includes in printed reports, and all the tabulated figures, whether in print or not, are available on computer tapes. In addition, some of the 1990 census data files on tape also are available on CD-ROM laser disc and microfiche. See chapter 5 for a complete discussion of census data products.

Over the years, the Census Bureau has increased its efforts to help people obtain and use census statistics. The Census Bureau publishes guides describing the collection, processing, content, and use of the data from its censuses and surveys. It conducts conferences, seminars, and workshops for data users. Staff members are available to answer inquiries and provide consultation on data products and services. Information services specialists in each of the Census Bureau's 12 regional offices play an important role in training and consultation.

The Census Bureau also helps users obtain data and assistance from sources outside the Federal Government. A major development since the mid-1970's is the State Data Center (SDC) program. Through it, the Census Bureau and State governmental and academic organizations assist data users in all States, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands of the United States. The Census Bureau furnishes the SDC participants (approximately 1,400 organizations) with training, technical assistance, and data products. They, in turn, offer data and assistance to community leaders, business people, local government officials, and others.

The Business/ Industry Data Center (BIDC) program, begun in 1988, is an outgrowth of the SDC program. Many States are participating. The centers receive economic data from the Census Bureau and other Federal agencies for use in furthering economic development and assisting business people and other data users.

In 1990, the Census Bureau launched the Census Information Centers program to provide nonprofit organizations with a focus on minority concerns better access to census data. A pilot project involving several organizations is underway.

The Census Bureau maintains a list of public and private organizations that offer data processing and other services related to census data and associated products. This program is called the National Clearinghouse for Census Data Services.

See chapter 7 for a complete discussion of sources, services, and reference publications.

## “THE OTHER 9 YEARS”

People often ask what the Census Bureau does “the other 9 years” when it is not taking the decennial census of population and housing. The Census Bureau is responsible for numerous additional statistical activities, many of which continue throughout the decennial census year as well as the remainder of the decade.

One responsibility is preparation for the next census of population and housing. Planning for the 1990 census, for instance, began in 1983 and included a wide range of research, field testing, and consultation. Planning for the 2000 census has already begun.

Through other censuses, surveys, and estimates programs, the Census Bureau compiles and issues (in reports, computer tape, CD-ROM's, and other media) data on subjects as diverse as appliance sales, neighborhood conditions, and exports to other countries. Here are examples of the information published about—

- *People:* Age, race, sex, income, poverty, child care, child support, fertility, noncash benefits, education, commuting habits, pension coverage, unemployment, and ancestry
- *Business and industry:* Number of employees, total payroll, sales and receipts, and products manufactured or sold
- *Housing and construction:* Value of new construction, numbers of owners and renters, property value or rent paid, housing starts, fuels used, and mortgage costs
- *Farms:* Number, acreage, livestock, and crop sales
- *Governments:* Revenues and expenditures, taxes, employment, and pension funds
- *Foreign trade:* Exports and imports, origin and destination, and units shipped
- *Other nations:* Population, birth rates, death rates, literacy, and fertility

The other censuses, such as agriculture, retail trade, manufactures, and governments, are collected for years ending in “2” and “7.” Surveys and estimates programs generate data as often as every month concerning the population, retail trade, foreign trade, and other subjects.

Many of the monthly “economic indicators” that measure how the Nation is doing come directly or indirectly from the Census Bureau. Examples are: employment and unemployment; housing starts; wholesale trade and retail trade; manufacturers' shipments, inventories, and orders; export and import trade; and sales of single-family homes.

The other statistical activities of the Census Bureau are described in chapter 7 in the section titled “Other Census Bureau Resources.”

# CHAPTER 2.

## Questions Asked

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### INTRODUCTION

#### Choosing the Questions

No part of census planning is more important than selecting the questions that will produce the data people need. The census is taken because it is constitutionally mandated. In addition, Federal agencies, State and local governments, business groups, demographers, community organizations, and others have demonstrated important requirements for information on the population and housing characteristics of the country.

The content of the 1990 census questionnaire can be viewed as a continuation of the census experience of recent decades, since most questions remained essentially the same. The relative stability of the content stems from the continued relevance and usefulness of many basic items and the need to measure how the country has changed over time. Figure 2-1 compares the 1990 census content with that of the 1980 census. It also shows whether the questions were asked on a 100-percent or sample basis. (Sampling rates varied depending on the type and population size of areas. For 1990, the national average was approximately 17 percent; for 1980, 19 percent.)

In planning for the 1990 census, the Census Bureau consulted thousands of people to help ensure that it would ask the most useful questions. Local Public Meetings, cosponsored by the Census Bureau and State and local organizations, were a primary source of information about what data the user community needed at the State and local levels. At least one meeting was held in every State, the District of Columbia, Puerto Rico, and the Virgin Islands of the United States. The first of the 65 meetings was held in April 1984; the last in October 1985. The Census Bureau also consulted government officials in the Pacific Outlying Areas (American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the Republic of Palau) about the content of the questionnaires for their areas.

Conferences were held with representatives of public and private organizations and minority and ethnic groups to obtain information about their special data needs. Regional meetings were held with American Indian tribal

and Alaska Native government officials. Every State legislature was invited to meet with Census Bureau officials, and 40 States participated. The Census Bureau also consulted with its public advisory committees.

To determine Federal data needs, the Census Bureau sought guidance from other agencies through the Federal Agency Council on the 1990 census. The agencies were asked to identify all legal mandates and programs requiring census data. Ten interagency working groups, chaired by Census Bureau staff and with participants from 35 Federal departments and agencies, also provided guidance.

These consultations resulted in some additions, deletions, and changes between the 1980 and 1990 census questionnaires. The additions and deletions are noted here; changes in the wording of questions are described later. The question on access to living quarters (for example, from a common hall or through someone else's quarters) was dropped; it was used in the 1980 census to help define a housing unit. The Census Bureau replaced the 1980 short-form question on "number of units at address" with a question on "number of units in structure," which had been included on the long form in 1980. (Short- and long-form questionnaires are discussed at length later in this chapter.)

A new item identifying congregate housing was added to the contract rent question. Congregate housing refers to housing in which the cost of meals is included in the rent or obtained on a contractual basis. A growing number of elderly people live in such housing. This addition reflects the broad interest of public policy planners in the aging and disabled populations. The question asks, "Does the monthly rent include any meals?"

The questions on disability were changed, at the request of data users, by replacing an inquiry on ability to use public transportation with one on ability to go outside of the home alone (for example, to shop) and to take care of personal needs (for example, to dress oneself). Three sample population subjects were dropped because users had only limited uses for the items: carpooling arrangements, weeks looking for work in the previous year, and activity 5 years ago (that is, whether in a job, college, or the Armed Forces). Another sample population subject, marital history, also was dropped because other questions had greater priority and to help reduce respondent burden.

Several sample housing subjects were eliminated: the number of stories and presence of an elevator in the structure, the type of cooking fuel and water-heating fuel, the presence of air conditioning, the number of bathrooms,

Figure 2-1. Comparison of Question Topics on the 1990 and 1980 Questionnaires

Question number	Topic or item	100 percent or sample (S) <sup>1</sup>		Question number	Topic or item	100 percent or sample (S) <sup>1</sup>	
		1990	1980			1990	1980
	<b>POPULATION</b>				<b>HOUSING</b>		
1	Name .....	100	100	H1	Coverage questions <sup>4</sup> .....	100	100
2	Household relation/ ship .....	100	100	H2	Units in structure .....	100	S
3	Sex .....	100	100	H3	Number of rooms .....	100	100
4	Race .....	100	100	H4	Tenure (owned or rented) .....	100	100
5	Age .....	100	100	H5	Screening questions for value and rent (acreage and commercial establishments) .....	100	100
6	Marital status .....	100	100	H6	Value .....	100	100
7	Spanish/ Hispanic origin .....	100	100	H7a	Contract rent .....	100	100
8	Place of birth .....	S	S	H7b	Congregate housing (meals included in rent) .....	100	-
9	Citizenship .....	<sup>2</sup> S	S	C1	Vacancy status <sup>5</sup> .....	100	100
10	Year of immigration .....	S	S	C2	Boarded-up status <sup>5</sup> .....	100	100
11	School enrollment and type .....	S	S	D	Duration of vacancy <sup>5</sup> .....	100	100
12	Schooling completed .....	<sup>2</sup> S	S	H8	Year householder moved into unit .....	S	S
13	Ancestry .....	S	S	H9	Bedrooms .....	S	S
14	Residence 5 years ago .....	S	S	H10	Complete plumbing facilities .....	<sup>2</sup> S	100
15	Current language and ability to speak English .....	S	S	H11	Complete kitchen facilities .....	S	S
16	Age screening question (items 17-33 are limited to persons 15 years old and over) .....	<sup>2</sup> S	S	H12	Telephone .....	S	S
17a, b	Veteran status and period of service .....	<sup>2</sup> S	S	H13	Automobiles, vans, or light trucks available .....	S	-
17c	Total years of military service .....	S	S	H14	Fuels used for house heating .....	S	S
18	Work disability .....	S	S	H15, H16	Source of water and method of sewage disposal .....	S	S
19	Mobility and self-care limitations .....	S	S	H17	Year structure built .....	S	S
20	Children ever born .....	S	S	H18	Condominium identification .....	S	100
21a, 25,	Employment status .....	S	S	H19	Farm residence status .....	<sup>2</sup> S	S
26	Hours worked last week .....	S	S	H20	Cost of utilities and fuels (component of gross rent and selected monthly owner costs) .....	S	S
21b	Place of work .....	S	S	H21 to H26	Selected shelter costs for homeowners .....	<sup>2</sup> S	S
22	Means of transportation to work .....	S	S	Derived <sup>3</sup>	Persons in unit (household size) .....	100	100
23a	Private vehicle occupancy .....	S	S	Derived	Persons per room .....	100	100
23b	Departure time for work .....	S	S	Derived	Gross rent .....	S	S
24a	Travel time to work .....	S	S	Derived	Selected monthly owner costs .....	<sup>2</sup> S	S
24b	Year last worked .....	S	S	Derived	Access to unit .....	-	100
27	Industry .....	S	S	Derived	Air-conditioning .....	-	S
28	Occupation .....	S	S	Derived	Automobiles available .....	(See H13)	S
29	Class of worker .....	S	S	Derived	Bathrooms .....	-	S
30	Weeks worked last year .....	S	S	Derived	Fuels used for water heating and cooking .....	-	S
31a, b	Hours usually worked per week last year .....	S	S	Derived	Heating equipment .....	-	S
31c	Income, by type .....	<sup>2</sup> S	S	Derived	Number of living quarters at address .....	-	100
32, 33	Family size and household size .....	100	100	Derived	Stories in structure and presence of elevator .....	-	S
Derived <sup>3</sup>	Family type and household type .....	100	100	Derived	Vans or light trucks available .....	(See H13)	S
Derived	Poverty status .....	S	S	Derived			
Derived	Type of group quarters .....	S	S	Derived			
Derived	Activity 5 years ago .....	-	S	Derived			
Derived	Carpooling arrangements .....	-	S	Derived			
Derived	Marital history .....	-	S	Derived			
Derived	Public transportation disability .....	-	S	Derived			
Derived	Weeks unemployed last year .....	-	S	Derived			

<sup>1</sup> "S" indicates sample subject covered only on the long-form questionnaire.

<sup>2</sup> Significantly changed from 1980 version in concept or amount of detail.

<sup>3</sup> "Derived" refers to items which do not appear on the questionnaire but are calculated by combining information from other items. For example, while no question specifically asks family size, family size can be determined from responses to the household relationship question.

<sup>4</sup> These questions help ensure that the coverage of household members is complete.

<sup>5</sup> Determined by the enumerators. See "For Census Use" section of the questionnaire, page 31.

and the type of heating equipment. The 1980 short-form questions on plumbing facilities and whether the unit is a condominium were transferred to the long form.

Although the Census Bureau has the responsibility for determining the content of the census questionnaires, the proposed questions are subject to outside review. The Census Bureau's authorizing legislation, Title 13, United States Code, directs that the Secretary of Commerce "shall prepare questionnaires, and shall determine the inquiries, and the number, form, and subdivisions thereof, for the statistics, surveys, and censuses provided for in this title." The Secretary delegates this responsibility to the Director of the Census Bureau. The Federal Reports Act of 1942, however, requires the Census Bureau to submit census questionnaires to the Office of Management and Budget for review. In addition, title 13 requires the Census Bureau, 3 years before Census Day, to advise Congress of the proposed subject coverage in the census. Two years before Census Day, the Census Bureau must transmit to Congress the specific questions it plans to include.

## Testing Question Wording

The Census Bureau began testing proposed 1990 census questionnaire content in test censuses in 1985. Several tests took place during the years 1985-89; however, the 1986 National Content Test (NCT) was the most significant for content testing. It was designed to provide information on the accuracy of the data collected and the ability and willingness of people to answer the questions. Approximately 48,000 households received questionnaires. The NCT used seven different questionnaire versions, three short and four long forms.

The Census Bureau conducted several special-purpose tests of the race and Hispanic-origin questions. For example, in 1987, the Special Urban Survey tested refinements of the race and Hispanic-origin questions that results of the NCT and other tests suggested were needed. This survey consisted of a sample of about 27,000 households in selected sites throughout the country. The Census Bureau also conducted focus group sessions of selected population groups in different areas of the country to determine how well the questions and instructions were understood by respondents.

A dress rehearsal census in 1988 tested most of the proposed 1990 census questions and procedures. The dress rehearsal was aimed at implementing the 1990 census procedures under as near census-like conditions as possible. The Census Bureau employed the full array of methods, techniques, workflows, equipment applications, and promotion and outreach programs intended for use in the national census.

The dress rehearsal took place at three sites:

1. St. Louis city, MO, which was part of a major metropolitan area and contained an inner-city area considered hard to enumerate

2. East Central Missouri, which contained several types of enumeration areas: rural territory, seasonal housing areas, and a city (Columbia) that was not expected to be difficult to enumerate
3. A sparsely populated rural area (except for the city of Pasco) in eastern Washington that contained the Colville and Spokane American Indian reservations

The three sites were chosen because they possessed characteristics in terms of population density, mail delivery schemes, rural and ethnic diversity, and terrain that approximated much of the 1990 census environment.

## Facts About Whom?

The 1990 Census of Population and Housing was the 21st Decennial Census and marked the bicentennial of census-taking in our country. The Census Bureau sought to enumerate every person in the United States as of April 1, 1990, except residents of embassies and foreign nationals visiting this country temporarily. The U.S. Constitution (Amendment 14, Section 2) mandates that "Representatives shall be apportioned among the several States according to their respective numbers, counting the whole number of persons in each State . . ." Consequently, the Census Bureau counts all persons—"the whole number"—who live in the United States.

In accordance with census practice dating back to 1790, each person enumerated in the census is counted as an inhabitant of his or her "usual place of residence." This is the place where the person lives and sleeps most of the time; it is not necessarily the same as the legal residence, voting residence, or domicile. Persons who have no usual place of residence are recorded as living in the area where they were found at the time of the census.

The 1990 Census of Population and Housing covered the 50 States and the District of Columbia. Censuses also were taken in Puerto Rico, the Virgin Islands of the United States, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the Republic of Palau. Outside of the United States, the questionnaires and procedures varied to accommodate local requirements. The census included military personnel and members of the Coast Guard, their dependents, and civilians living on military installations in the United States, Puerto Rico, and outlying areas. The Department of Defense (DOD), its branches, and the Coast Guard assisted in the count. Both land-based personnel and the crews of military and Coast Guard vessels were enumerated. (See ch. 3 for information on procedures.)

The DOD also provided a count of DOD employees abroad, both military and civilian, and their dependents. Counts of other Federal employees and their dependents abroad were furnished by other Federal agencies. (See ch. 3.) These counts of Federally employed Americans and their dependents living overseas were combined with the U.S. resident population as determined by the census for

purposes of calculating the 1990 congressional apportionment. This was only the second time (1970 was the first) that the “overseas” military and Federal civilian population was included in the congressional apportionment population.

The basic enumeration unit in the census is the housing unit—a house, an apartment, or a single room or group of rooms occupied or intended for occupancy as a separate living quarters. Population questions are asked about every person in a housing unit, and housing questions are asked about the housing unit. There are special procedures designed to enumerate persons living in group quarters, such as college dormitories, military barracks, and prisons. Because questions on rent, value of property, and similar topics would often be inappropriate, no housing information is collected for group quarters. There also are special procedures designed to enumerate persons living in transient situations (on streets, in railway stations and bus depots, in emergency shelters, etc.).

## The Questionnaires

**Short Form and Long Form**—There are two principal types of questionnaires: the short form and the long form. About 83 percent of households were enumerated on short forms, and the remainder—approximately one in every six households—was enumerated on long forms (also referred to as sample forms). Sampling allows the Census Bureau to collect accurate information on additional topics while minimizing costs and respondent burden.

On the short form, seven population questions were asked about each household member, and six housing questions were asked about each housing unit. There also was a two-part question on who was listed on the questionnaire. For the average household, the form took approximately 14 minutes to complete.

The questions on the short form also appeared on the long form. Data derived from these questions are referred to as 100-percent data.

Additional questions (many with two or more parts) on 26 population and 19 housing subjects appeared only on the long form. For the average household, the long form took approximately 43 minutes to complete.

The 100-percent data, prepared from responses to the questions that appear on both the short and long forms, are more precise than sample data. In addition, 100-percent data are processed first and are available sooner.

**Questionnaire Design**—Facsimiles of the respondent instructions and long-form questionnaire pages appear at the end of this chapter. The instructions, “Your Guide for the 1990 U.S. Census Form,” were furnished with the long form and, in an abbreviated version, with the short form in areas where the census was conducted by mail.

Since the questionnaires included space for up to seven persons, pages with questions 8 through 33 were repeated seven times in an actual long form. If there were more than seven persons in a household, respondents were instructed to list all household members on the form and to answer the questions for seven household members. Then an enumerator called or visited the housing unit to collect information on the other household members.

The questionnaires for 1990 required approximately the same length of time for respondents to complete as those used in the 1980 census. Although more topics were eliminated than were added, some topics, such as education and disability, were changed or expanded. The questionnaires reflected a balancing of data needs against the length of time it took householders to fill out the questionnaires.

(For more information on questionnaire design and sampling technique, see the section on questionnaires in ch. 3. The effect of sampling on data reliability is discussed under “Sampling Variability” in ch. 6.)

## POPULATION QUESTIONS

### 100 Percent

**1. Name**—Space was provided on page 1 of the questionnaire for respondents to list the names of persons who usually lived in the household or who had no other home; guidelines described whom to list and whom not to list. The respondents also were instructed to write their names at the tops of the “person” columns on the 100-percent population pages inside the questionnaire and, on the long form, at the beginning of the appropriate set of sample population pages. (See the questionnaire reproduced at the end of this chapter.)

Names of individuals have been collected in each census since 1850. From 1790 to 1840, only the names of family “heads” were gathered. Having the names on the questionnaires helps Census Bureau staff to keep track of the forms and guards against missing or double counting a person. Like other individual information, names are kept strictly confidential. They are not entered into the confidential machine-readable files where individual information is recorded for purposes of preparing statistical tabulations.

**2. Household Relationship**—Questions on the relationship of household members have been standard census items since 1880. The 1990 question on household relationship, as in 1980, asked how each household member was related to a reference person—the person named in column 1. Respondents were instructed to identify in column 1 that household member (or one of the members) in whose name the housing unit was owned or rented. If there was no such person, the name of any adult household member who was not a roomer, boarder, or paid employee could be entered.

The reference person is called a “householder” in tabulations. Other family categories, such as “husband/wife,” “natural-born or adopted son/ daughter,” “stepson/stepdaughter,” and “grandchild,” indicate the relationship to the householder. Other relationships, such as “uncle,” could be written in, but they were assigned codes for specific categories only during the processing of sample questionnaires.

User groups recommended that the Census Bureau add the stepchildren and grandchildren categories for 1990. The recommendation was a response to the growing demand for more descriptive data reflecting family life and its changes, among which are reductions in the proportion of children who live with both natural parents and increases in the proportion of children who live with one natural parent and one stepparent, and with one or more stepsiblings.

Persons not related to the reference person were recorded in one of these categories: “roomer, boarder, or foster child”; “housemate, roommate”; “unmarried partner”; or “other nonrelative.” These categories are somewhat different from 1980—“foster child” is included in connection with the “roomer, boarder” category, rather than mentioned just in an instruction booklet; “unmarried partner” is a separate category.

Enumerators visiting group quarters determined, in lieu of “relationship,” whether residents were “institutionalized” or “noninstitutionalized” persons and coded these in a box at the bottom of the form.

Much analysis of the population’s social and economic characteristics is based on what the household relationship item reveals about living arrangements. The Census Bureau characterizes households as either “family” or “nonfamily.” (Consequently, households substantially outnumber families.) Family households are those with at least one person related to the householder by blood, marriage, or adoption. The family consists of the householder and all the household members related to him or her. Other persons in the household (like all persons in “nonfamily” households) are termed “unrelated individuals.”

Families are further classified as (1) “married couple families” when a household member is listed as “husband/wife” of the householder, (2) “families with male householder, no wife present,” or (3) “families with female householder, no husband present.”

**3. Sex**—The questionnaire included a question on the sex of individuals. Questions relating to gender have been included in all censuses.

**4. Race**—Information has been requested on “race” or “color” in each census since 1790. The concept of race used by the Census Bureau is not intended to provide any clear-cut, scientific definition of biological stock. Rather, it reflects the self-identification of the respondents.

For 1990, the question included the following response categories:

- White
- Black or Negro
- Indian (Amer.) (respondents also were asked to print the name of the enrolled or principal tribe)
- Eskimo
- Aleut
- Chinese
- Filipino
- Hawaiian
- Korean
- Vietnamese
- Japanese
- Asian Indian
- Samoan
- Guamanian
- Other API (other Asian or Pacific Islander; a write-in category for those persons who identify as Burmese, Cambodian, Fijian, Hmong, Indonesian, Laotian, Bangladeshi, Pakistani, Tongan, Thai, Cambodian, Sri Lankan, etc.)
- Other race (respondents were asked to write in the race)

All the written entries under “Indian (Amer.)” and “Other API” were reviewed and coded during 100-percent processing of the 1990 census questionnaires, so that tabulations of the data could be provided in the data products presenting 100-percent data. A substantial portion of the entries for the “Other race” category also were reviewed, edited, and coded during the 100-percent processing. The remaining entries under “Other race” underwent review and coding during sample processing, and most indicated Hispanic origin, such as Mexican, Cuban, or Puerto Rican. Their race classification was left as “Other race.” In the 1980 census, there was only a limited clerical review of the race responses on the 100-percent forms; coding was done only on the sample questionnaires for race and American Indian tribe.

The Census Bureau publishes a full range of race categories. However, in some data products, the data are shown for the following groups: White; Black; American Indian, Eskimo, or Aleut; Asian or Pacific Islander; and Other race. (In some tables, where “Other race” is not shown, an aggregate figure for this group can be derived by subtracting the identified groups from the total.) Other data products present more detailed categories, such as Cambodian, Chinese, Eskimo, and Tongan. Spanish/Hispanic origin is an ethnic category and is not considered a race category; see item 7, below.

**5. Age**—Age has been covered in each census since 1790. For the 1990 census, respondents entered both their age at last birthday and year of birth. Month of birth was not asked, a change for 1990. Review of preliminary 1990 data indicated that respondents tended to provide their age as of the date of completion of the questionnaire instead of April 1, 1990.

**6. Marital Status**—Information on marital status has been collected in every census since 1880. Although the 1990 census asked the marital status of every person, the responses are tabulated only for persons 15 years old and over, as in 1980. This was a change from the period 1950–1970 when they were tabulated for persons 14 years old and over. Those persons whose only marriage had been annulled were instructed to mark “never married,” as in previous censuses. In the past two censuses, there was a sample question on marital history. It was not included in the 1990 census questionnaire.

**7. Spanish/ Hispanic Origin**—This question was designed to obtain counts of the Nation’s Hispanic-origin population by major Hispanic-origin groups. It was asked on a 100-percent basis for the first time in 1980; a similar question appeared on the 1970 5-percent sample questionnaire.

As in the 1980 census question, the category “No (not Spanish/ Hispanic)” appeared first to emphasize that the question pertained to all respondents; in tests, this approach reduced nonresponse and errors. Hispanic respondents were asked to fill in one circle to further identify their origin as “Mexican, Mexican-Am., Chicano”; “Puerto Rican”; “Cuban”; or “other Spanish/ Hispanic.” Persons who responded “yes” to any of the categories are collectively referred to as “persons of Hispanic origin.” The last category asked the respondent to write in a group and gave these examples: “Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.” The write-in responses on only the sample questionnaires were reviewed and coded, and some sample data products present tabulations for the various write-in categories.

## Sample

**8. Place of Birth**—For the 1990 census, the instruction to report the person’s birth as occurring in the mother’s State of residence was revised to report the person’s birth in the State where it occurred. Data on place (that is, State or country) of birth have been collected in each census since 1850. Answers to this question and the citizenship question are used to classify the population as either “native” or “foreign born.” The “native” population includes those persons born in the United States, Puerto Rico, the Virgin Islands of the United States, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands; and persons born at sea or in a foreign country who have at least one native American parent.

Data from this item provide information on lifetime migration between time of birth and the census date. More recent migration is measured by answers to question 14 (residence 5 years ago).

**9 and 10. Citizenship and Year of Entry Into the United States**—The citizenship question was asked of all long-form respondents. (In 1980, the citizenship question was asked only of foreign-born persons; U.S. born persons were assumed to be U.S. citizens.) Citizens were asked if they were born in the United States; born in Puerto Rico, Guam, the Virgin Islands of the United States, or the Commonwealth of the Northern Mariana Islands; born abroad of American parent(s); or naturalized.

The census question on citizenship did not attempt to determine the legal status of noncitizens. Persons not born in the United States were asked to report their year of entry in a separate question (item 10). The question formerly was not asked of persons born in Puerto Rico, Guam, the Virgin Islands of the United States, or the Commonwealth of the Northern Mariana Islands.

Information on citizenship is used to classify the Nation’s population into two major categories: “citizens” and “non-citizens.” Some tabulations show data for citizens (by whether native or naturalized) and for noncitizens.

There also were questions on citizenship in the censuses of 1820, 1830, 1870, 1890, 1950, and 1970. Year-of-immigration questions were asked of foreign-born persons in censuses from 1890-1930 and from 1970 through 1990.

**11 and 12. Education**—Question 11 was intended to determine whether the person was enrolled in regular school or college at the time of the census and, if so, what type of school. The categories were reworded: the 1980 response “Yes, private, church-related” was dropped because there were no major requirements for the information; the 1990 census responses listed were “Yes, public school, public college” and “Yes, private school, private college.”

The instructions stated that enrollment in nursery school, kindergarten, elementary, high school, or college was to be counted as regular school enrollment. Not to be counted were enrollment in a trade or business school, company training, or tutoring which was not to be accepted for credit at a regular elementary school, high school, or college.

Question 12 established the highest grade completed in school or highest degree received, rather than the highest grade or academic year attended as in the 1980 census. If the person was in school on Census Day, this item reflected the level of the previous grade in which the person was enrolled or the highest degree received. The item on “educational attainment” is generally tabulated for persons 16 to 19 years, 18 years and over, and 25 years and over.

School enrollment data for individuals have been collected in each census since 1850. Questions on years of school completed have been asked in censuses since 1940, replacing the literacy question that had been asked

from 1840 to 1930. An item on vocational training, included in the 1970 census, has not been used subsequently because tests showed that a single item on vocational training did not elicit reliable responses.

**13. Ancestry (Ethnic Origin)**—A person was asked to report ancestry based on his or her nationality group, lineage, or country in which the person or the person's parents or ancestors were born before their arrival in the United States. Respondents were asked to fill in their ancestry or ethnic origin; examples were given, such as German, Italian, Afro-American, Croatian, Cajun, Jamaican, Korean, Mexican, Nigerian, Slovak, and Ukrainian.

The ancestry question asked the ancestry of all long-form respondents, regardless of how many generations their ancestors had been in the United States. Persons with more than one ancestry (origin) who could not indicate a single specific ancestry group were able to report a multiple ancestry; for example, German-Irish. Instructions for the ancestry question specified that a religious group was not to be reported as a person's ancestry.

The 1980 census was the first census that included a self-identification question on ancestry. It replaced questions in the 1970 and earlier censuses on the country of birth of the person's parents which were used in combination with the person's place-of-birth question to identify first- and second-generation Americans (the "foreign stock" population).

**14. Residence 5 Years Ago**—This question, for persons born at least 5 years ago, asked if they were living in the same house 5 years ago. If the answer was no, the question asked for the State (or foreign country), county, and place of residence at that time, and whether the location was inside or outside the city/ town limits.

In most tabulations, the data are reported for residence in the same house, different house within the same county, different county within the same State, or the region of residence if a different State.

Questions on prior residence have been asked in each census since 1940, and all but the 1950 question referred to 5 years earlier. The 1950 question asked about residence in the preceding year.

**15. Current Language and Ability to Speak English**—The focus of the three-part 1990 census question on language, introduced in the 1980 census, was current language usage. The question identified the language currently spoken in the home and, for persons who spoke a language other than English, how well they spoke English. The specific languages are coded into detailed categories and reported in some tabulations for the United States, regions, and other large areas. Only from 10 to 16 languages or language groups are shown in the tabulations for small areas. Similar questions about language or "mother tongue" have been asked in each census since 1910.

**16. Age Screening**—Persons under 15 years old were instructed not to answer the remaining population questions (items 17 to 33), which covered such subjects as veteran status, employment, occupation, and income.

**17. Veteran Status and Period of Service**—Veteran status, collected in part a of the question, is tabulated only for persons 16 years old and over. For 1990, a category for Reserves or National Guard was added to part a. In part b, veterans specified the period in which they served in any of eight categories (for example, Vietnam era—August 1964–April 1975); they were instructed to darken a circle for each applicable period. A new response category was added to the question on period of military service to identify separately persons whose active-duty military service was September 1980 or later. A fill-in question (part c) was added that asked how many years of active-duty military service the respondent had.

The Department of Veterans Affairs uses veteran status data to measure and evaluate the impact of veterans' programs. In addition, it uses census data as baseline figures in preparing its intercensal estimates of the number of veterans by county.

A question on military pensioners was asked in 1840, questions on Civil War veterans appeared in 1890 and 1910, and a veteran status item has been included in every census since 1930. Before 1960, however, statistics on veterans were tabulated for governmental use and were not always included in census reports. The 1980 questions on veteran status and period of service were to be answered by women for the first time.

**18 and 19. Disability**—The questions on disability were included on the questionnaire to meet the need for small area data on the characteristics of disabled persons. Question 18 concerned work disability status, and question 19 was a two-part question on (1) limitations in the ability to go outside the home alone, for example, to shop or visit a doctor's office, and (2) limitations in self-care activities, such as bathing, dressing, or getting around inside the house.

Respondents were asked to report these disabilities only if they resulted from physical, mental, or other health conditions that had lasted for 6 or more months. Tabulations of work disability are limited to persons 16 to 64 years old.

The 1970 census household questionnaire was the first in this century to contain questions on disability; previously such questions were included in the censuses of 1880 and 1890 and in special supplementary schedules in 1900–1930. Questions on work disability and public transportation disability were asked in the 1980 census.

**20. Children Ever Born**—The question on the number of children each woman has ever borne is an important source of data for assessing population growth trends. The question is tabulated for all women regardless of marital

status. A similar question has been asked in each census since 1890 except those in 1920 and 1930; prior to 1970, the question was restricted to women who had ever been married.

**21, 25, and 26. Employment Status**—The census is the only source of comprehensive and detailed employment data for small areas such as counties, cities, and census tracts. The questions on labor force in the 1990 census were basically the same as those used in the 1980 census. In both censuses, the items were carried on the sample questionnaires.

Beginning with 1980, employment data were published for persons 16 years old and over who were employed, unemployed, or members of the Armed Forces, to conform with the official definition of the labor force.

Employed persons were defined as civilians 16 years old and over who were either: “at work” at a job or business last week (item 21a), or temporarily absent from work due to illness, vacation, strike, or other personal reasons (item 25).

Persons whose activity consisted of their own housework, school work, or volunteer work for a religious, charitable, or similar organization were not classified as employed.

Unemployed persons were defined as civilians 16 years old and over not at work (and not otherwise with a job) who were actively looking for work during the last 4 weeks and were available to accept a job if offered (item 26). Included also as unemployed were persons who were not at work and were waiting to be called back to a job from which they had been laid off (item 25). People who were out of work but were not looking for work, including those sometimes called “discouraged workers,” were not considered unemployed—since they were not looking for work, they were not in the labor force.

The question on hours worked (item 21b), a write-in entry, was used primarily to differentiate full-time workers (those working 35 or more hours during the reference week) from part-time workers.

Employment status questions were asked on a supplemental questionnaire on unemployment in 1930 and have appeared on the regular census questionnaires in each census since 1940.

**22, 23, and 24. Place of Work and Journey to Work**—Data on place of work and journey to work are needed for planning highways, road improvements, and public transportation facilities, and for designing programs to reduce energy consumption. As in 1980, the questionnaire asked for the specific place of work last week (item 22); the number of minutes usually spent getting from home to work (item 24b); the usual means of transportation to work last week (item 23a); and, if in a car, truck, or van, the number of persons who usually rode (item 23b). The 1980 item on carpool (driving or riding) arrangements was dropped. New for 1990, item 24a asked what time the

respondent usually left for work last week. This item provides information on peak hours of travel to work, which is important for transportation planning.

Respondents were asked to give the exact address of their place of work. This information makes it possible for the Census Bureau to produce more detailed tabulations for smaller geographic areas. While most of the census place-of-work tabulations use cities or counties as the place of work, tabulations offering more geographic detail (for example, at the census tract level) can be prepared at the data user’s request and expense. The place-of-work question was first asked in 1960, when only city, county, and State data were obtained.

Data on means of transportation to work also have been collected since 1960. Beginning in the 1980 census, this item was expanded to include trucks, vans, motorcycles, and bicycles as separate categories. For 1990, several adjustments were made in categories; for example, the separate categories for “car,” “truck,” and “van” were combined into a single category. The items on travel time to work and vehicle occupancy were introduced in 1980.

**27. Year Last Worked**—Item 27 asked for the year the person last worked. It is similar to the question asked in 1980. It served as a screening question for questions 28 through 30 about industry, occupation, and type of employment—questions which persons who had never worked or who last worked more than 5 years ago did not have to answer. It also provides counts of persons by year last worked, information that is relevant to the study of work experience. (See item 31.) Similar questions have been asked since 1960.

**28, 29, and 30. Industry, Occupation, and Class of Worker**—Industry, occupation, and class of worker are important in describing the work activity of the Nation’s labor force. Industry is the “kind of business” in which a person works. Occupation is the “kind of work” the person does. Class of worker (item 30) refers to the classification of workers according to the type of ownership of the employing organization. Industry and occupation required write-in responses.

The question on industry contained three parts, which together collected the information used to code the person into a particular industry category. The first part (item 28a) asked for the name of the company or organization for which the person worked. This item was revised for 1990 to permit active-duty Armed Forces personnel to write in their branch of service, and by changing the 1980 instruction, to allow them for the first time to report their military occupations in item 29. Responses to item 28a were checked against an employer name and code list developed mainly from the Census Bureau’s economic censuses.

The second part of the industry question (item 28b) asked for a description of the kind of business, specifically the activity at the person’s place of employment. The third

part (item 28c) asked the respondent to classify the business or industry as manufacturing, wholesale trade, retail trade, or other.

The responses are coded to about 230 industry categories, with the coding scheme generally based on the 1987 Standard Industrial Classification (SIC) system. In some cases, the code was selected based on the response to 28a. More often, the code was assigned based on the response to 28b. Information from 28c was used to supplement that provided in 28b.

For most industries, data from the 1990 census are compatible with categories from the 1980 and 1970 censuses, although there have been a number of minor adjustments to the SIC system.

The occupation question (number 29) asked the respondent to describe his or her kind of work (for example, registered nurse or personnel manager) and most important activities or duties (for example, caring for patients or directing hiring policies). Both responses help the Census Bureau assign the correct occupation category. There are about 500 occupation categories to which these responses are coded, with the coding scheme generally based on the 1980 Standard Occupational Classification (SOC) System.

Class of worker (item 30) distinguishes among employees of private companies; employees of Federal, State, or local government, separately; persons working without pay in a family business or farm; and self-employed persons. A self-employed person whose business is incorporated is counted as an employee of a private company. The 1980 response category "Employee of private company, business, or individual, for wages, salary, or commissions" was split in 1990 into two categories: one for employees of private for-profit employers and the other for employees of private not-for-profit employers, such as charitable organizations.

Questions on industry, occupation, and class of worker applied to the person's job activity or business last week, or, if not at work, the person's most recent job. If the person had not worked in the last 5 years, these questions were skipped. If the person held more than one job, the questions applied to the one at which the person worked the most hours last week.

Most tabulations of these variables pertain to employed persons, although some figures are also reported for the experienced civilian labor force, which includes both employed and unemployed persons with previous work experience.

Data on occupation have been collected in each census since 1850. Industry data were collected in 1820, 1840, and in each census since 1910. A class-of-worker question has been asked in each census since 1910.

**31. Work Experience**—Question 31 determined if the respondent worked at all during the preceding calendar year (31a), the number of weeks worked (31b), and the number of hours usually worked per week (31c). These items are especially important for putting the earnings data from item 32 in perspective. Since all income-related information refers to the preceding year, the information on

work experience for that year is necessary to calculate hourly and weekly earnings and to take into account differences in work input when making income comparisons among various groups. (See also the discussion of item 27, "year last worked.")

The questions on hours usually worked and weeks unemployed in the year prior to the census were asked for the first time in the 1980 census. Questions on weeks worked have appeared in each census since 1880. The question on weeks unemployed was dropped from the 1990 census questionnaire.

**32. and 33. Income by Type**—Item 32 asked for separate money income amounts from each of eight different sources:

- Wages, salary, bonuses, or tips from all jobs
- Self-employment income (net) from nonfarm business
- Farm self-employment income (net)
- Interest, dividends, net rental or royalty income, or income from estates and trusts
- Social Security or Railroad Retirement
- Public assistance or welfare
- Retirement, survivor, or disability pensions
- All other (including veterans' payments, unemployment compensation, child support, alimony, and other regular payments)

This approach encouraged complete reporting of income and permitted the tabulation of more meaningful income statistics. As a doublecheck on accuracy and completeness, the respondent was asked to add up the amounts received from each source and report the total 1989 income in item 33.

In certain tabulations, the first three sources of income—wages and salaries, net business income, and farm self-employment income—are added together and designated as "earnings." Interest, dividends, and net rental and royalty income are grouped together and differentiated from other income types.

The income items referred explicitly to income received during all of the previous calendar year. However, the characteristics of each person, such as age and labor force status, and the composition of households and families referred to the time of the census. For example, the income of the family does not include amounts received by persons who were members of the family during all or part of the income year if these persons did not reside with the family at the time of enumeration. On the other hand, family income includes amounts reported by any related persons who did not reside with the family during the income year but who were members of the family on Census Day.

Question 32 was similar to the 1980 question, with a few changes. Pension income was distinguished from "other sources" for the first time, and income from estates and trusts was combined with the income from interest, dividends, net rental income, and net royalties.

Although some tables show earnings or other types of income, most deal with total income. Most common are figures on household income, derived by adding up the income of each person 15 years old and over in the household. Family income data also are presented frequently. Family income differs from household income because it excludes income received by any household members not related to the householder and omits persons living alone or in nonfamily households. A few summary statistics are also presented for persons 15 years old and over.

Income statistics generally are tabulated for income ranges (for example, the number of households with income in 1989 less than \$5,000, \$5,000 to \$9,999, and so on), with ranges becoming broader at higher income levels. In 1990 reports, the upper ranges are \$50,000 to \$74,999, \$75,000 to \$99,999, and \$100,000 or more. In machine-readable products, they extend to \$100,000 to \$124,999, \$125,000 to \$149,999, and \$150,000 or more. The same ranges are used in presenting data for households, families, and nonfamily households. Median income figures are shown by selected characteristics, such as family type; and some mean and per capita figures are shown.

Poverty status is a derived measure that is determined by comparing the income of a family (or unrelated individual) with the appropriate figure in a series of income thresholds. (See fig. 2-2.) If the particular income is below its threshold, the family (or unrelated individual) is classified as below the poverty level. The thresholds, which vary according to the size of the family, the number of related children, and the age of the householder (for 1- and 2-person households only), have been established as the standard Federal definition of poverty for statistical purposes. The poverty thresholds are adjusted every year in

accordance with changes in the Consumer Price Index so that comparisons of poverty statistics between censuses are valid, even though both incomes and prices have been affected by inflation.

The poverty status of unrelated individuals (persons living alone or who are unrelated to the householder) is determined independently on the basis of his or her own income. Poverty status is not determined for unrelated individuals under 15 years old or for persons living in college dormitories, military barracks, or institutions.

Income questions have been asked in each census since 1940. Limited data on poverty status were prepared from the 1960 census. Poverty data appeared in regular census report series for the first time with the 1970 census.

## HOUSING QUESTIONS

### Housing Unit

A housing unit can be a house, an apartment, a group of rooms, a single room, a mobile home, a boat, or other accommodations occupied as a separate living quarters or, if vacant, intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants live and eat separately from any other person in the building and which have direct access from outside the building through a common hall. The occupants may be a single family, one person living alone, two or more unrelated persons who share living arrangements, and so forth.

Both occupied and vacant housing units are included in the housing inventory, except boats, tents, vans, mobile homes on sales lots, and the like are included only if they are occupied. Vacant units still under construction, burned out or otherwise open to the elements, and nonresidential buildings are not considered to be housing units.

Living quarters containing nine or more persons unrelated to the person in charge are not counted in the housing inventory. They are considered group quarters.

Figure 2-2. Poverty Thresholds in 1989 by Size of Family and Number of Related Children Under 18 Years

Size of Family Unit	Weighted average thresholds	Related children under 18 years								
		None	One	Two	Three	Four	Five	Six	Seven	Eight or more
One person (unrelated individual).	\$6,310									
Under 65 years.....	6,451	\$6,451								
65 years and over.....	5,947	5,947								
Two persons.....	8,076									
Householder under 65 years...	8,343	8,303	\$8,547							
Householder 65 years and over.....	7,501	7,495	8,515							
Three persons.....	9,885	9,699	9,981	\$9,990						
Four persons.....	12,674	12,790	12,999	12,575	\$12,619					
Five persons.....	14,990	15,424	15,648	15,169	14,798	\$14,572				
Six persons.....	16,921	17,740	17,811	17,444	17,092	16,569	\$16,259			
Seven persons.....	19,162	20,412	20,540	20,101	19,794	19,224	18,558	\$17,828		
Eight persons.....	21,328	22,830	23,031	22,617	22,253	21,738	21,084	20,403	\$20,230	
Nine or more persons.....	25,480	27,463	27,596	27,229	26,921	26,415	25,719	25,089	24,933	\$23,973

College dormitories, homes for the aged, and military barracks are examples of group quarters. The census does not produce any information about the housing characteristics of group quarters.

Persons who live in group quarters, however, are counted in most tabulations of the population questions. Figures are published on the number of persons in seven different types of group quarters, including four types of institutions (mental hospitals, homes for the aged, correctional institutions, and other— orphanages, chronic disease hospitals, training schools for juvenile delinquents, and so forth), and three types of noninstitutional group quarters (military barracks, college dormitories, and other— rooming houses, communes, and so forth).

Several housing questions were dropped for 1990: the number of dwelling units at a single address, whether the entrance to the living quarters was through someone else's living quarters, number of stories in the building and presence of an elevator, type of cooking fuel and water heating fuel, presence of air-conditioning, type of heating equipment, and number of bathrooms.

## 100 Percent

**H1. Coverage**—The coverage question helped ensure that all appropriate persons were listed. This item is not tabulated.

**H2. Units in Structure**—The question on units in structure, previously a sample question, was moved to the short form, replacing a units-at-address question. The units-in-structure item asked the respondent to pick the category that best described the building in which he or she lived, such as a mobile home or trailer, a detached one-family home, or a building with three or four apartments.

The question does not collect data on the number of residential buildings or structures—only on the number of housing units in various types of buildings.

Data on units in structure have been collected in each census since 1940, and on mobile homes since 1950. The units-at-address question, which had been on the 1970 and 1980 short forms, was not repeated.

**H3. Number of Rooms**—A traditional measure of housing-unit size, the number of rooms includes only whole rooms used for living purposes and excludes bathrooms, open porches, balconies, halls, etc. Information on number of rooms has been collected in each census since 1940. The measure “persons per room” is derived for each household by dividing the number of persons in the unit by the number of rooms. A ratio of more than 1.00 means that there are more persons than separate rooms, and this is frequently taken to indicate crowding.

**H4. Tenure (Owned or Rented)**—One of the most important housing variables is tenure. Owner-occupied units are those that are owned or being bought by someone who lives in the unit. “Renter-occupied” covers all

other occupied units, including those for which no cash rent is paid, such as a parsonage. Many statistics on the housing subjects in the census are tabulated separately for owner-occupied and renter-occupied units.

For 1990, the question on ownership included a mortgaged/ not mortgaged category. Home ownership “free and clear” was listed separately from ownership with a mortgage or loan. Those two choices were combined in 1980 and earlier censuses.

**H5. Acreage and Commercial Establishment**—Data on acreage were obtained from item H5a, which was asked for all occupied and vacant one-family houses and mobile homes. This question is used to exclude owner-occupied and renter-occupied one-family houses and mobile homes on 10 or more acres from certain statistics on financial characteristics. The question on acreage is the same in 1970 and 1980 and was asked for the first time of mobile home occupants in the 1990 census.

Data for business on property were obtained from item H5b, which was asked for all occupied and vacant one-family houses and mobile homes. This question is used to exclude owner-occupied one-family and mobile home units with businesses or medical offices from certain statistics on financial characteristics. Data on business on property have been collected since 1940.

**H6. Value**—Value is a homeowner's estimate of what the property (house and lot or condominium unit) would sell for if it were for sale. Value data were obtained only for owner-occupied units and for vacant units that were for sale (in which case the asking price was recorded). Mobile homes, units on 10 acres or more, units with commercial use, and noncondominium units in multiunit buildings are excluded from specified owner-occupied value tabulations.

Value data were collected in 1890 in a supplemental questionnaire, in 1920 for mortgaged nonfarm homes only, and in every census since 1930; the 1980 census was the first in which value was recorded for condominium units. Value categories on the 1990 questionnaire reflected increased housing prices—the highest category was \$500,000 or more; whereas, in 1980, \$200,000 or more was the highest category.

**H7. Contract Rent**—Contract rent is the monthly dollar rent agreed to or contracted for, regardless of whether any furnishings, utilities, or services are included. It was obtained for units occupied by renters and for vacant units that were for rent (in which case the figures reflect rent asked). One-family houses on a property of 10 acres or more were excluded. There were 26 response categories for rent. The highest category for the 1990 census was “\$1,000 or more”; in 1980, it was “\$500 or more.” The lower limit in 1990 was “Less than \$80”; in 1980 it was “Less than \$50.”

The rent question has been asked in each census since 1930.

A second part of the question—new for 1990—concerned congregate housing, that is, housing in which the cost of meals is included in the rent or obtained on a contractual basis. This item was intended to gather information on special housing for the elderly.

## Sample

**H8. Year Householder Moved Into Unit**—This question measures housing turnover and neighborhood stability. The question uses the year the householder moved in to establish how long the present occupants have lived in this house or apartment. It differs from population item 14, which focuses on place of residence 5 years ago.

The question also was asked in the 1980 census. For the 1990 census, categories were revised to include detail on the 1980's and exclude detail before 1959. The category "always lived here" was dropped. In 1970, a similar question was asked of each member of the household. Data on this subject are available from each census since 1960.

**H9. Bedrooms**—The number of bedrooms is an indicator of the size of a housing unit. When cross-classified with rent or value, it provides a standard basis for evaluating the cost of shelter. Response categories range from no bedrooms to five or more bedrooms. The question for 1990 asked for the count of bedrooms that would be used if the unit were for sale or rent. This is a change from the 1980 census, which asked for rooms used mainly for sleeping even if also used for other purposes. Similar data have been collected since 1960.

**H10. Complete Plumbing Facilities**—The presence of hot and cold running water, a flush toilet, and a bathtub or shower were combined into a complete plumbing facilities question, as they were in the 1980 census. However, unlike in the 1980 census, the 1990 question did not seek to determine if the facilities were also used by another household. The question was asked on a sample basis in the 1990 census, rather than of all households as in earlier censuses.

Obtained in every census since 1940, plumbing information is used in combination with other data, such as overcrowding, as an indicator of housing deficiency. Only two plumbing categories now appear in tabulations: units with complete facilities and units lacking complete plumbing.

**H11. Complete Kitchen Facilities**—As for 1980, the 1990 question defined complete kitchen facilities as a sink with piped water, a range or cookstove, and a refrigerator. The 1970 counterpart of this question was asked of housing units on a 100-percent basis, and it distinguished between kitchen facilities used by a single household and those also used by another household. The 1940 and 1950 censuses asked about the presence of a refrigerator and kitchen sink, and the 1960 census added cooking facilities. The separate items were combined into one in 1970.

Data from this sample question are useful for preparing tabulations of the characteristics of units lacking complete kitchen facilities and for planning community nutrition programs such as "meals on wheels."

**H12. Telephone in Unit**—As in the 1980 census, the telephone question focused on the presence of a telephone within the particular housing unit. (Separate from this question, respondents were asked to write their telephone numbers on the back of the questionnaire as an aid to followup enumeration.)

Data on the presence of telephones in housing units have been collected since 1960 and can be a useful housing indicator and a guide in designing surveys that rely primarily on telephone interviewing. Data on telephones also are used in planning community programs, particularly for the elderly.

**H13. Vehicles Available**—For 1990, a single question was asked about the availability of automobiles, vans, and light trucks. For 1980, there were two separate items: one on the availability of automobiles and one on the availability of vans or light trucks.

Because the question was asked about vehicles kept at home for use by members of the household, rather than about vehicle ownership, it includes company cars or vans kept at home but not personal vehicles permanently out of working order or kept elsewhere.

Data on the number of vehicles available for personal use have been collected since 1960 and are important for developing transportation policies, studying energy consumption and air pollution, and planning parking facilities.

**H14. Fuel Used for House Heating**—This item provides information on the type of fuel used to heat the house or apartment and includes solar energy as a separate response category for the first time. Only one question was asked on fuel use in the 1990 census. All the other fuel-related questions asked in 1980 and earlier on water heating, cooking fuel, heating equipment, and air-conditioning were deleted.

Questions on heating fuel have been asked in each census since 1940. Data on type of fuel used have many applications, such as in preparing projections concerning the need for new power plants, pipelines, electricity transmission lines, and pollution controls.

**H15 and H16. Source of Water and Sewage Disposal**—Information on source of water and sewage disposal is of interest to public health officials and others concerned about the need for water treatment or sewage facilities. Units without a septic tank, cesspool, or hookup to a public sewer also may represent problems in terms of housing adequacy. The distinction between drilled and dug wells was new for 1980; otherwise, similar data are available since 1960.

**H17. Year Structure Built**—The question on the year a structure was built provides data on the age of the housing stock. This information is useful in such activities as city planning and product marketing. Corresponding questions have been asked in each census since 1940.

For 1990, respondents were provided with a “Don’t know” category, permitting those who did not know the year the structure was built to indicate that rather than guess at the year.

**H18. Condominiums**—In a condominium, a person owns a specific apartment in a building—or a house in a development—along with a share in such common areas as hallways, lobbies, and grounds. Each owner has an individual deed and, possibly, a mortgage as well.

Condominiums were identified in a separate question so that a count of renter-occupied and vacant condominium units could be prepared. This also was the approach in the 1980 census in a question asked on a 100-percent basis. In 1970 a question on tenure identified condominiums together with cooperatives as a subcategory of owner-occupied units. This approach was discontinued because tests showed that respondents frequently misinterpreted the concept of a cooperative building, so statistics are not separately reported for units in cooperative buildings.

**H19. Farm Residence Status**—The farm status items on acreage of property and sales of farm products are used to classify the population by farm or nonfarm residence. The current Federal definition of a farm is a place that had, or would normally expect to have had, \$1,000 or more in sale of crops, livestock, or other farm products during the preceding calendar year. For census purposes, a farm residence also must be located in rural territory. The farm residence question is structured to exclude units on a city or suburban lot or on a place of less than 1 acre. During the preparation of tabulations, any other housing units in urban areas are automatically excluded from the classification “farm residence.”

The farm status question was similar in 1980. The 1990 question did not ask respondents to differentiate between buildings on 1 to 9 acres and those on 10 acres or more. Item H19b expanded the categories for sale of agricultural goods from the property. The top end in 1980 was \$2,500 or more; for 1990 it was \$10,000 or more.

The 1920 census was the beginning of the modern series on farm population. In the censuses from 1920 to 1950, farm residence was determined essentially by self-identification; that is, respondents were asked whether they lived on a farm. Determination of farm residence—based on acreage and sales of farm products—began in 1960.

**H20. Cost of Utilities and Fuels**—Costs of utilities and fuels were obtained primarily to serve as components of gross rent and selected monthly costs for owners (discussed under H21 to H26 below).

The respondent was requested to indicate annual costs for electricity; gas; water; and oil, coal, kerosene, wood, etc.; or to indicate either that the cost was included in rent or in the condominium fee, or that there was no charge or the fuel was not used. In 1980, the question asked average monthly costs for electricity and gas, and annual costs for water and for oil, coal, etc.

**H21 to H26. Selected Shelter Costs for Homeowners**—The questions on shelter costs for 1990 covered such costs more completely than those asked in 1980. Before the 1980 census, information on shelter costs was available only for renters in gross rent and had been collected in censuses beginning in 1940. A new set of questions to determine major components of shelter costs for homeowners was first asked in 1980 in response to the growing demand for such information.

Separate questions were asked on the costs of annual real estate taxes (item H21); annual fire and hazard insurance premiums, expanded for 1990 to include flood insurance payments (item H22); and monthly mortgage payments (item H23b). For 1990, the instructions for H23b asked the respondent to include only the payments on the first mortgage or contract to purchase. In 1980, respondents were asked to include second or junior mortgage payments here.

Additional questions determined whether the figure reported for the mortgage payment in H23b included taxes and insurance. The responses to the additional questions determined whether H21 and H22 should be disregarded when computing aggregate cost figures or whether they needed to be recomputed to a monthly basis and added to H23b.

Finally, average monthly utility and fuel costs from H20 were added to derive the total for selected monthly owner costs for each owner-occupied unit. The term “selected” is used because the figures do not include some types of homeowner expenses, such as those for repairs and maintenance. Nonetheless, selected monthly owner costs are reasonably comparable to gross-rent figures obtained for renters, and both can be compared to household income. Two useful derived variables are selected monthly owner costs as a percentage of household income, and its counterpart, gross rent as a percentage of household income.

For the first time, shelter-cost questions for 1990 covered home equity loans, flood insurance, condominium monthly fees, and mobile home costs. In particular, H24a was revised to include home equity loans. In 1980, only second or junior mortgages were asked about. Question H24b asked for regular monthly payment on junior mortgage or home equity loans. Respondents in 1980 were asked if they had a second or junior mortgage, but they were not to list the amount of this payment separately. Question H25, a new question, asked for a monthly

condominium fee. Another new question, H26, focused on monthly mobile home fees, including personal property taxes, site rent, and registration and license fees, but excluding real estate taxes.

As with value figures, selected monthly owner costs were not obtained for houses on 10 or more acres, and houses with a commercial establishment or medical office on the property. The universe for selected monthly owner costs is labeled "specified owner-occupied units" in reports and tape documentation, and is further defined in a footnote. Some tabulations of selected monthly owner costs separate units with a mortgage from units without a mortgage.

## SUMMARY

The Census Bureau consulted many Federal agencies, State and local governments, demographers, community

organizations, business groups, and other data users concerning the subject content and the wording of questions.

Every household enumerated in the 1990 census was asked to answer seven population and six housing questions (100-percent questions). The remaining 26 population and 19 housing questions (sample questions) were asked of a national sample of about 17 percent of the households. This chapter discussed the questions asked, the reasons for their inclusion, and comparable questions in past censuses.

The content of the questionnaire cannot be understood fully without a knowledge of the means by which the data are collected and processed. These procedures are discussed in chapter 3.

# Facsimiles of Respondent Instructions and Questionnaire Pages

## Your Guide for the 1990 U.S. Census Form

This guide gives helpful information on filling out your census form. If you need more help, call the local U.S. census office. **The telephone number is on the cover of the questionnaire.** After you have filled out your form, please return it in the **envelope** we have provided.

On the inside	Page
<b>How</b> to fill out your census form	<b>2</b>
<b>Example</b>	<b>2</b>
<b>Your</b> answers are confidential	<b>2</b>
<b>Instructions</b> for the census questions	<b>3–11</b>
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<b>Why</b> the census asks certain questions	<b>12</b>

CENSUS '90

U.S. DEPARTMENT OF COMMERCE  
BUREAU OF THE CENSUS



D-4

## How to Fill Out Your Census Form

Please use a black lead pencil only. Black lead pencil is better to use than ballpoint or other pens. Most questions ask you to fill in the circle, or to print the information. See **Example** below.

Make sure you print answers for everyone in this household. If someone in the household, such as a roomer or boarder, does not want to give you all the information for the form, print at least the person's name and answer questions 2 and 3. A census taker will call to get the other information directly from the person.

There may be a question you cannot answer exactly. For example, you might not know the age of an elderly person or the price for which your house would sell. Ask someone else in your household; if no one knows, give your best estimate.

Instructions for individual questions begin on page 3 of this guide. They will help you to understand the questions and answer them correctly.

If you have a question about filling out the census form or need assistance, call the local U.S. census office. **The telephone number is given on the cover of the questionnaire.**

If you do not mail back your census form, a census taker will be sent out to assist you. But it saves time and your taxpayer dollars if you fill out the form yourself and mail it back.

### Example

a. Age	b. Year of birth	a. Age	b. Year of birth
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## Your Answers Are Confidential

The law authorizing the census (Title 13, U.S. Code) also provides that your answers are confidential. No one except census workers may see your completed form and they can be fined and/or imprisoned for any disclosure of your answers. Only after 72 years can your individual census form become available to other government agencies (whether federal, state, county, or local). Until then, no other person or business can see your individual report.

The same law that protects the confidentiality of your answers requires that you provide the information asked in this census to the best of your knowledge.

Information collected from the decennial census is used for a variety of statistical purposes. Census information is used to find out where funding is most needed for schools, health centers, highways, and other services. Census results are used by members of public and private groups—including community organizations—and by businesses and industries, as well as by agencies at all levels of government.

## Instructions for Questions 1a through 7

- 1a. List everyone who lives at this address in question 1a. If you are not sure if you should list a person, see the rules on page 1 of the census form. If you are still not sure, answer as best you can and fill in "Yes" for question H1a or H1b, as appropriate.
 

If there are more than seven people in your household, please list all the persons in question 1a, complete the form for seven people, and mail it back in the enclosed envelope. A census taker will call to obtain the information for the additional persons.
- b. If everyone listed in question 1a usually lives at another address(es), print the address(es) in 1b.
2. Fill one circle to show how each person is related to the person in column 1. If **Other relative** of the person in column 1, print the exact relationship such as son-in-law, daughter-in-law, grandparent, nephew, niece, mother-in-law, father-in-law, cousin, and so on.
 

If the **Stepson/stepdaughter** of the person in column 1 also has been legally adopted by the person in column 1, mark **Stepson/stepdaughter** but do not mark **Natural-born or adopted son/daughter**. In other words, **Stepson/stepdaughter** takes precedence over **Adopted son/daughter**.
4. Fill ONE circle for the race each person considers himself/herself to be.
 

If you fill the **Indian (Amer.)** circle, print the name of the tribe or tribes in which the person is enrolled. If the person is not enrolled in a tribe, print the name of the principal tribe(s).

If you fill the **Other API** circle [under **Asian or Pacific Islander (API)**], **only** print the name of the group to which the person belongs. For example, the **Other API** category includes persons who identify as Burmese, Fijian, Hmong, Indonesian, Laotian, Bangladeshi, Pakistani, Tongan, Thai, Cambodian, Sri Lankan, and so on.

If you fill the **Other race** circle, be sure to print the name of the race.

If the person considers himself/herself to be **White, Black or Negro, Eskimo or Aleut**, fill one circle only. **Please do not print the race in the boxes.**

The **Black or Negro** category also includes persons who identify as African-American, Afro-American, Haitian, Jamaican, West Indian, Nigerian, and so on.

All persons, regardless of citizenship status, should answer this question.
5. Print age at last birthday in the space provided (print "00" for babies less than 1 year old). Fill in the matching circle below each box. Also, print year of birth in the space provided. Then fill in the matching circle below each box. For an illustration of how to complete question 5, see the **Example** on page 2 of this guide.
6. If the person's only marriage was annulled, mark **Never married**.
7. A person is of Spanish/Hispanic origin if the person's origin (ancestry) is Mexican, Mexican-Am., Chicano, Puerto Rican, Cuban, Argentinean, Colombian, Costa Rican, Dominican, Ecuadoran, Guatemalan, Honduran, Nicaraguan, Peruvian, Salvadoran, from other Spanish-speaking countries of the Caribbean or Central or South America, or from Spain.
 

If you fill the **Yes, other Spanish/Hispanic** circle, print one group.

A person who is not of Spanish/Hispanic origin should answer this question by filling the **No (not Spanish/Hispanic)** circle. Note that the term "**Mexican-Am.**" refers only to persons of Mexican origin or ancestry.

All persons, regardless of citizenship status, should answer this question.

## Instructions for Question H1a through H1b

- H1a. Refer to the list of persons you entered in question 1a on page 1. If you left anyone out of your list because you were not sure if the person(s) should be listed, answer question H1a as **Yes**. Then enter the name(s) and reason(s) why you did not list the person(s) on the lines provided. Otherwise, answer question H1a as **No**.
- b. If you included anyone on your list even though you were not sure that you should list the person(s), answer question H1b as **Yes**. Then enter the name(s) and reason(s) why you listed the person(s) on the lines provided. Otherwise, answer question H1b as **No**.

## Instructions for Questions H2 through H7b

- H2.** Fill only one circle.
- Count all occupied and vacant apartments in the house or building. Do not count stores or office space.
- Detached* means there is open space on all sides, or the house is joined only to a shed or garage. *Attached* means that the house is joined to another house or building by at least one wall that goes from ground to roof. An example of **A one-family house attached to one or more houses** is a house in a row of houses attached to one another.
- A mobile home or trailer that has had one or more rooms added or built onto it should be counted as a *one-family detached house*; a porch or shed is not considered a room.
- H3.** Count only whole rooms in your house, apartment, or mobile home used for living purposes, such as living rooms, dining rooms, kitchens, bedrooms, finished recreation rooms, family rooms, etc. Do not count bathrooms, kitchenettes, strip or pullman kitchens, utility rooms, foyers, halls, half-rooms, porches, balconies, unfinished attics, unfinished basements, or other unfinished space used for storage.
- H4.** Housing is owned if the owner or co-owner lives in it. Mark **Owned by you or someone in this household with a mortgage or loan** if the house, apartment, or mobile home is mortgaged or there is a contract to purchase. Mark **Owned by you or someone in this household free and clear (without a mortgage)** if there is no mortgage or other debt. If the house, apartment, or mobile home is owned but the land is rented, mark this question to show the status of the house, apartment, or mobile home.
- Mark **Rented for cash rent** if any money rent is paid, even if the rent is paid by persons who are not members of your household, or by a federal, state, or local government agency.
- Mark **Occupied without payment of cash rent** if the unit is **not** owned or being bought by the occupants and if money rent is **not** paid or contracted. The unit may be owned by friends or relatives who live elsewhere and who allow occupancy without charge. A house or apartment may be provided as part of wages or salary. Examples are: caretaker's or janitor's house or apartment; parsonages; tenant farmer or sharecropper houses for which the occupants do not pay cash rent; or military housing.
- H5a.** Answer H5a and H5b if you live in a one-family house or a mobile home; include only land that you own or rent.
- b.** A business is easily recognized from the outside; for example, a grocery store or barber shop. A medical office is a doctor's or dentist's office regularly visited by patients.
- H6.** If this is a house, include the value of the house, the land it is on, and any other structures on the same property. If the house is owned but the land is rented, estimate the combined value of the house and the land. If this is a condominium unit, estimate the value for your house or apartment including your share of the common elements. If this is a mobile home, include the value of the mobile home and the value of the land. If you rent the land, estimate the value of the rented land and add it to the value of the mobile home.
- H7a.** Report the rent agreed to or contracted for, even if the rent for your house, apartment, or mobile home is unpaid or paid by someone else.
- |                          |                   |                          |                 |
|--------------------------|-------------------|--------------------------|-----------------|
| If rent is paid:         | Multiply rent by: | If rent is paid:         | Divide rent by: |
| By the day . . . . .     | 30                | 4 times a year . . . . . | 3               |
| By the week . . . . .    | 4                 | 2 times a year . . . . . | 6               |
| Every other week . . . . | 2                 | Once a year . . . . .    | 12              |
- b.** Answer **Yes** if meals are included in the monthly rent payment, or you must contract for meals or a meal plan in order to live in this building.

## Instructions for Questions H8 through H19b

- H8.** The *person listed in column 1* refers to the person listed in the first column on page 2. This person should be the household member (or one of the members) in whose name the house, apartment, or mobile home is owned, being bought, or rented. If there is no such person, any adult household member can be the person in column 1. Mark when this person last moved into this house, apartment, or mobile home.
- H9.** Include all rooms intended to be used as bedrooms in this house, apartment, or mobile home, even if they are currently being used for other purposes.
- H10.** Mark **Yes, have all three facilities** if you have all the facilities mentioned; all facilities must be in your house, apartment, or mobile home, but not necessarily in the same room. Consider that you have hot water even if you have it only part of the time. Mark **No** if any of the three facilities is not present.
- H11.** The kitchen sink, stove, and refrigerator must be located in the building but do not have to be in the same room. Portable cooking equipment is not considered as a range or cookstove.
- H12.** Answer **Yes** only if the telephone is located in your house, apartment, or mobile home.
- H13.** Count company cars (including police cars and taxicabs) and company trucks of one-ton capacity or less that are regularly kept at home and used by household members for nonbusiness purposes. Do **not** count cars or trucks permanently out of working order.
- H14.** Fill the circle for the fuel used most to heat your house, apartment, or mobile home. In buildings containing more than one apartment you may obtain this information from the owner, manager, or janitor.
- Solar energy** is provided by a system that collects, stores, and distributes heat from the sun. **Other fuel** includes any fuel not separately listed; for example, purchased steam, fuel briquettes, waste material, etc.
- H15.** If a well provides water for five or more houses, apartments, or mobile homes, mark **A public system**. If a well provides water for four or fewer houses, apartments, or mobile homes, fill one of the circles for **Individual well**.
- Drilled wells**, or small diameter wells, are usually less than 1½ feet in diameter. **Dug wells** are generally hand dug and are larger than 1½ feet wide.
- H16.** A **public sewer** may be operated by a government body or private organization. A **septic tank** or **cesspool** is an underground tank or pit used for disposal of sewage.
- H17.** Fill the circle corresponding to the period in which the original construction was completed, *not* the time of any later remodeling, additions, or conversions. In buildings containing more than one apartment, the owner, manager, or janitor may be of help in determining when the building was built.
- If you live in a houseboat or a trailer or mobile home, fill the circle corresponding to the model year in which it was manufactured.
- If you do not know the period when the building was first constructed, fill the circle for **Don't know**.
- H18.** A *condominium* is a type of ownership in which the apartments, houses, or mobile homes in a building or development are individually owned, but the common areas, such as lobbies, halls, etc., are jointly owned. Cooperative occupants should mark **No**.
- H19a.** Answer H19a and H19b if you live in a one-family house or mobile home.
- b.** *This property* is the acreage on which the house is located; it includes adjoining land you rent for your use. Report sales made in 1989 from this property by you or previous occupants.

## Instructions for Questions H20 through H26

**H20.** If your house or apartment is rented, enter the costs for utilities and fuels **only if you pay for them in addition to the rent entered in H7a.**

If you live in a condominium, enter the costs for utilities and fuels **only if you pay for them in addition to your condominium fee.**

If your fuel and utility costs are already included in your rent or condominium fee, fill the **Included in rent or in condominium fee** circle. Do not enter any dollar amounts.

The amounts to be reported should be the total amount for the past 12 months. Estimate as closely as possible when exact costs are not known. If you have lived in this house or apartment less than 1 year, estimate the yearly cost.

Report amounts even if your bills are unpaid or paid by someone else. If the bills include utilities or fuel used also by another apartment or a business establishment, estimate the amounts for your own house or apartment. If gas and electricity are billed together, enter the combined amount on the electricity line and bracket [ ] the two utilities.

**H21.** Report taxes for all taxing jurisdictions (city or town, county, state, school district, etc.) even if they are included in your mortgage payment, not yet paid or paid by someone else, or are delinquent. Do not include taxes past due from previous years.

**H22.** When premiums are paid on other than a yearly basis, convert to a yearly basis. Enter the yearly amount even if no payment was made during the past 12 months.

**H23a.** The word *mortgage* is used as a general term to indicate all types of loans that are secured by real estate.

**b.** Enter a monthly amount even if it is unpaid or paid by someone else. If the amount is paid on some other periodic basis, see the instructions for H7a to change it to a monthly amount.

Include payments on first mortgages and contracts to purchase only. Payments for second or junior mortgages and home equity loans should be reported in H24b.

**H24a.** A second or junior mortgage or home equity loan is secured by real estate.

**b.** Enter a monthly amount even if it is unpaid or paid by someone else. If the amount is paid on some other periodic basis, see instructions for H7a and change it to a monthly amount. Include payments on all second or junior mortgages or home equity loans.

**H25.** A *condominium fee* is normally assessed by the condominium owners' association for the purpose of improving and maintaining the common areas. Enter a monthly amount even if it is unpaid or paid by someone else. If the amount is paid on some other periodic basis, see the instructions for H7a on how to change it to a monthly amount.

**H26.** Report amount even if your bills are unpaid or paid by someone else. Include payments for personal property taxes, land or site rent, registration fees and license fees. Do not include real estate taxes already reported in H21. The amount to be reported should be the total amount for an entire 12-month billing period even if made in two or more installments. Estimate as closely as possible when exact costs are not known.

## Instructions for Question 8

**8.** For persons born in the United States:

Print the name of the State in which this person was born. If the person was born in Washington, D.C., print District of Columbia. If the person was born in a U.S. territory or commonwealth, print Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, or Northern Marianas.

For persons born outside the United States:

Print the name of the foreign country or area where the person was born. Use current boundaries, not boundaries at the time of the person's birth. Specify whether Northern Ireland or the Republic of Ireland (Eire); East or West Germany; North or South Korea; England, Scotland, or Wales (not Great Britain or United Kingdom). Specify the particular country or island in the Caribbean (not, for example, West Indies).

## Instructions for Questions 9 through 13

**9.** A person should fill the **Yes, U.S. citizen by naturalization** circle only if he/she has completed the naturalization process and is now a United States citizen. If the person was born in Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas, he/she should fill the **Yes, born in Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas** circle. If the person was born outside the United States (or at sea) and has at least one American parent, he/she should fill the **Yes, born abroad of American parent or parents** circle.

**10.** If the person has entered the United States (that is, the 50 states and the District of Columbia) more than once, fill the circle for the latest year he/she came to stay.

**11.** Do not include enrollment in a trade or business school, company training, or tutoring unless the course would be accepted for credit at a regular elementary school, high school, or college.

A *public school* is any school or college that is controlled and supported primarily by a local, county, State, or Federal Government. Schools are private if supported and controlled primarily by religious organizations or other private groups.

**12.** Mark the category for the highest grade or level of schooling the person has **successfully completed** or the **highest degree** the person received. If the person is enrolled in school, mark the category containing the highest grade completed (the grade previous to the grade in which enrolled). Schooling completed in foreign or ungraded schools should be reported as the equivalent level of schooling in the regular American school system.

Persons who completed high school by passing an equivalency test, such as the General Educational Development (GED) examination, and did not attend college, should fill the circle for high school graduate.

Do not include vocational certificates or diplomas from vocational, trade, or business schools or colleges unless they were college level associate degrees or higher.

Some examples of *professional school degrees* include medicine, dentistry, chiropractic, optometry, osteopathic medicine, pharmacy, podiatry, veterinary medicine, law, and theology. Do not include barber school, cosmetology, or other training for a specific trade.

Do not include honorary degrees awarded by colleges and universities to individuals for their accomplishments. Include only "earned" degrees.

**13.** Print the ancestry group. Ancestry refers to the person's ethnic origin or descent, "roots," or heritage. Ancestry also may refer to the country of birth of the person or the person's parents or ancestors before their arrival in the United States. *All* persons, regardless of citizenship status, should answer this question.

Persons who have more than one origin and cannot identify with a single ancestry group may report two ancestry groups (for example, German-Irish).

Be specific. For example, print whether West Indian, Asian Indian, or American Indian. West Indian includes persons whose ancestors came from Jamaica, Trinidad, Haiti, etc. Distinguish Cape Verdean from Portuguese; French Canadian from Canadian; and Dominican Republic from Dominica Island.

A religious group should not be reported as a person's ancestry.

## Instructions for Questions 14a through 19

- 14a.** Mark **Yes** if this person lived in this same house or apartment on April 1, 1985, even if he/she moved away and came back since then. Mark **No** if this person lived in the same building but in a different apartment (or in the same mobile home or trailer but on a different lot or trailer site).
- b.** If this person lived in a different house or apartment on April 1, 1985, give the location of this person's usual home at that time.

### Part (1)

If the person lived in the United States on April 1, 1985, print the name of the State (or District of Columbia) where he or she lived. Continue with parts (2) through (4).

If the person lived in a U.S. territory or commonwealth, print the name of the territory or commonwealth, such as Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, or Northern Marianas. Then go to question 15a.

If the person lived outside the United States, print the name of the foreign country or area where he or she lived. Specify whether Northern Ireland or the Republic of Ireland (Eire); East or West Germany; North or South Korea; England, Scotland or Wales (not Great Britain or United Kingdom). Specify the particular country or island in the Caribbean (not, for example, West Indies). Then go to question 15a.

### Part (2)

If the person lived in Louisiana, print the parish name. If the person lived in Alaska, print the borough name. If the person lived in New York city and the county name is not known, print the borough name. If the person lived in an independent city (not in any county) or in Washington, D.C., leave blank and enter the city name in part (3).

### Part (3)

If the person lived in New England, print the name of the town rather than the village name, unless the name of the town is not known. If the person lived outside the limits or boundaries of any city or town, print the name of the post office or the nearest town and mark **No, lived outside the city/town limits** in part (4).

### Part (4)

Mark **Yes** if the location is now inside the city/town limits even if it was not inside the limits on April 1, 1985; that is, if the area was annexed by the city/town since that time.

- 15.** Mark **Yes** if the person sometimes or always speaks a language other than English at home.
- Do not mark **Yes** for a language spoken only at school or if speaking is limited to a few expressions or slang.
- Print the name of the language spoken at home. If this person speaks more than one non-English language and cannot determine which is spoken more often, report the first language the person learned to speak.
- 17a.** For a person with service in the National Guard or a military reserve unit, fill one of the two **Yes, active duty** circles if and only if the person has ever been called up for active duty other than training; otherwise, mark **Yes, service in Reserves or National Guard only**. For a person whose only service was as a civilian employee or volunteer for the Red Cross, USO, Public Health Service, or War or Defense Department, mark **No**. Count **World War II Merchant Marine Seaman** service as active duty; do **not** count other Merchant Marine service as active duty.
- 18.** Mark **Yes** to part (a) if a health condition substantially limits this person in his or her choice of occupation or if the condition limits the amount of work that can be accomplished in a given period of time. Mark **Yes** to part (b) if the health condition prevents this person from holding any significant employment.
- 19.** Consider a person to have difficulty with these activities if any of the following situations apply: (1) it takes extra time or extra effort for the person to perform one or more of the activities, (2) there are times when the person cannot perform one or more of the activities, or (3) the person is completely unable to perform one or more of the activities.

## Instructions for Questions 20 through 23b

- 20.** Count all children born alive, including any who have died (even shortly after birth) or who no longer live with you. Do not include miscarriages or stillborn children or any adopted, foster, or stepchildren.

### 21a. Count as work — Mark **Yes**:

- Work for someone else for wages, salary, piece rate, commission, tips, or payments "in kind" (for example, food, lodging received as payment for work performed).
- Work in own business, professional practice, or farm.
- Any work in a family business or farm, paid or not.
- Any part-time work including babysitting, paper routes, etc.
- Active duty in Armed Forces.

### Do not count as work — Mark **No**:

- Housework or yard work at home.
- Unpaid volunteer work.
- School work.
- Work done as a resident of an institution.

- 22a.** Include the street type (for example, St., Road, Ave.) and the street direction (if a direction such as "North" is part of the address). For example, print 1239 N. Main St. or 1239 Main St., N.W. not just 1239 Main.

*If the only known address is a post office box, give a description of the work location. For example, print the name of the building or shopping center where the person works, the nearest intersection, the nearest street where the workplace is located, etc. DO NOT GIVE A POST OFFICE BOX NUMBER.*

*If the person worked at a military installation or military base that has no street address, report the name of the military installation or base.*

*If the person worked at several locations, but reported to the same location each day to begin work, print the address of the location where he or she reported. If the person did not report to the same location each day to begin work, print the address of the location where he or she worked most last week.*

*If the person's employer operates in more than one location (such as a grocery store chain or public school system), print the exact address of the location or branch where the person worked. If the exact address of a school is not known, print the name of the school.*

*If the person worked on a college or university campus and the exact address of the workplace is not known, print the name of the building where he or she worked.*

- d.** *If the person worked in New York city and the county is not known, print the name of the borough where the person worked.*

*If the person worked in Louisiana, print the name of the parish where the person worked.*

*If the person worked in Alaska, print the name of the borough where the person worked.*

- e.** *If the person worked in a foreign country or Puerto Rico, Guam, etc., print the name of the country in 22e and leave the other parts of question 22 blank.*

- 23a.** *If the person usually used more than one type of transportation to get to work (for example, rode the bus and transferred to the subway), fill the circle of the one method of transportation that he/she used for most of the distance during the trip.*

- b.** *If the person was driven to work by someone who then drove back home or to a nonwork destination, fill the circle for **Drove alone**.*

*DO NOT include persons who rode to school or some other nonwork destination in the count of persons who rode in the vehicle.*

## Instructions for Questions 24a through 30

- 24a.** Give the time of day the person usually *left home to go to work*. DO NOT give the time that the person usually began his or her work.  
 If the person usually left home to go to work sometime *between 12:00 o'clock midnight and 12:00 o'clock noon*, fill the **a.m.** circle.  
 If the person usually left home to go to work sometime *between 12:00 o'clock noon and 12:00 o'clock midnight*, fill the **p.m.** circle.
- b.** Travel time is from door to door. Include time taken waiting for public transportation or picking up passengers in a carpool.
- 25.** If the person works only during certain seasons or on a day-by-day basis when work is available, mark **No**.
- 26a.** Mark **Yes** if the person tried to get a job or to start a business or professional practice at any time in the last 4 weeks; for example, registered at an employment office, went to a job interview, placed or answered ads, or did anything toward starting a business or professional practice.
- b.** Mark **No, already has a job** if the person was on layoff or was expecting to report to a job within 30 days.  
 Mark **No, temporarily ill** if the person expects to be able to work within 30 days.  
 Mark **No, other reasons** if the person could not have taken a job because he or she was going to school, taking care of children, etc.
- 27.** Look at the instructions for question 21a to see what to count as work. Mark **Never worked** if the person: (1) never worked at any kind of job or business, either full or part time, (2) never did any work, with or without pay, in a family business or farm, and (3) never served in the Armed Forces.
- 28a.** If the person worked for a company, business, or government agency, print the name of the company, not the name of the person's supervisor. If the person worked for an individual or a business that had no company name, print the name of the individual worked for. If the person worked in his/her own business, print "self-employed."
- b.** Print two or more words to tell what the business, industry, or individual employer named in 28a did. If there is more than one activity, describe only the major activity at the place where the person worked. Enter what is made, what is sold, or what service is given.  
 Some examples of what to enter:
- |   |                       |
|---|-----------------------|
| <b>Enter a description like the following –</b> | <b>Do not enter –</b> |
| Metal furniture manufacturing                   | Furniture company     |
| Retail grocery store                            | Grocery store         |
| Petroleum refining                              | Oil company           |
| Cattle ranch                                    | Ranch                 |
- 29.** Print two or more words to describe the kind of work the person did. If the person was a trainee, apprentice, or helper, include that in the description.  
 Some examples of what to enter:
- |   |                       |
|---|-----------------------|
| <b>Enter a description like the following –</b> | <b>Do not enter –</b> |
| Production clerk                                | Clerk                 |
| Carpenter's helper                              | Helper                |
| Auto engine mechanic                            | Mechanic              |
| Registered nurse                                | Nurse                 |
- 30.** Mark **Employee of a PRIVATE NOT-FOR-PROFIT . . . organization** if the person worked for a cooperative, credit union, mutual insurance company, or similar organization.  
 Employees of foreign governments, the United Nations, and other international organizations should mark **PRIVATE NOT-FOR-PROFIT . . . organization**.  
 For persons who worked at a public school, college or university, mark the appropriate *government* category; for example, mark **State GOVERNMENT employee** for a state university, or mark **Local GOVERNMENT employee** for a county-run community college or a city-run public school.

## Instructions for Questions 31a through 32h

- 31a.** Look at the instructions for question 21a to see what to count as work.
- b.** Count every week in which the person did any work at all, even for an hour.
- 32.** Fill the **Yes** or **No** circle for each part and enter the amount received during 1989.  
 If income from any source was received jointly by household members, report, if possible, the appropriate share for each person; otherwise, report the whole amount for only one person and fill the **No** circle for the other person.
- a.** Include wages and salaries from *all jobs before* deductions. Be sure to include any tips, commissions, or bonuses. Owners of *incorporated* businesses should enter their salary here. Military personnel should include base pay plus cash housing and/or subsistence allowance, flight pay, uniform allotments, reenlistment bonuses, etc.
- b.** Include *NONFARM* profit (or loss) from self-employment in sole proprietorships and partnerships. *Exclude* profit (or loss) of incorporated businesses you own.
- c.** Include *FARM* profit (or loss) from self-employment in sole proprietorships and partnerships. *Exclude* profit (or loss) of incorporated farm businesses you own. Also *exclude* amounts from land rented for cash but include amounts from land rented for shares.
- d.** Include interest received or credited to checking and savings accounts, money market funds, certificates of deposit (CDs), IRAs, KEOGHs, and government bonds.  
 Include dividends received, credited, or reinvested from ownership of stocks or mutual funds.  
 Include profit (or loss) from royalties and the rental of land, buildings or real estate, or from roomers or boarders. Income received by self-employed persons whose *primary* source of income is from renting property or from royalties should be included in questions 32b or 32c above. Include regular payments from an estate or trust fund.
- e.** Include Social Security (and/or Railroad Retirement) payments to retired persons, to dependents of deceased insured workers, and to disabled workers *before* Medicare deductions.
- f.** Include Supplemental Security Income received by aged, blind, or disabled persons, Aid to Families with Dependent Children, or income from other government programs such as general or emergency assistance. Do not include assistance received from private charities. *Exclude* assistance to pay for heating (cooling) costs.
- g.** Include retirement, disability, or survivor benefits received from companies and unions; Federal, State, and local governments, and the U.S. military. Include regular income from annuities and IRA or KEOGH retirement plans.
- h.** Include Veterans' (VA) disability compensation and educational assistance payments (VEAP), unemployment compensation, child support or alimony, and all other regular payments such as Armed Forces transfer payments; assistance from private charities; regular contributions from persons not living in the household, etc.  
*Do not include the following as income in any item:*
- Refunds or rebates of any kind
  - Withdrawals from savings of any kind
  - Capital gains or losses from the sale of homes, shares of stock, etc.
  - Inheritances or insurance settlements
  - Any type of loan
  - Pay in-kind such as food, free rent, etc.

## **What the Census Is About – Some Questions and Answers**

### **Why are we taking a census?**

The most important reason for taking a decennial census is to determine how many representatives each state will have in Congress.

### **What does the Census Bureau do with the information you provide?**

The individual information collected in the census is grouped together into statistical totals. Information such as the number of persons in a given area, their ages, educational background, the characteristics of their housing, etc., enable government, business, and industry to plan more effectively.

### **How long have we been taking the census?**

The first census was taken in 1790 in accordance with the requirement in the first article of the constitution. A census has been taken every 10 years since. The 1990 Decennial Census marks the 200th anniversary of the census.

### **How are you being counted?**

Census forms are delivered to all households a few days before census day. Households are requested to fill out the form and mail it back to the census office.

## **Why the Census Asks Certain Questions**

### **Here are a few reasons for asking some of the questions.**

*It is as important to get information about people and their houses as it is to count them.*

#### **Name?**

Names help make sure that everyone in a household is counted, but that no one is counted twice.

#### **Value or rent?**

Government and planning agencies use answers to these questions in combination with other information to develop housing programs to meet the needs of people at different economic levels.

#### **Complete plumbing?**

This question gives information on the quality of housing. The data are used with other statistics to show how the "level of living" compares in various areas and how it has changed over time.

#### **Place of birth?**

This question provides information used to study long-term trends as to where people move and to study migration patterns and differences in growth patterns.

#### **Job?**

Answers to the questions about the jobs people hold provide information on the extent and types of employment in different areas of the country. From this information, training programs can be developed and the need for new industries can be determined.

#### **Income?**

Income, more than anything else, determines how families or persons live. Income information makes it possible to compare the economic levels of different areas.

CENSUS '90

# OFFICIAL 1990 U.S. CENSUS FORM



Thank you for taking time to complete and return this census questionnaire. It's important to you, your community, and the Nation.

**The law requires answers but guarantees privacy.**

By law (Title 13, U.S. Code), you're required to answer the census questions to the best of your knowledge. However, the same law guarantees that your census form remains confidential. For 72 years--or until the year 2062--only Census Bureau employees can see your form. No one else--no other government body, no police department, no court system or welfare agency--is permitted to see this confidential information under any circumstances.

**How to get started--and get help.**

Start by listing on the next page the names of all the people who live in your home. Please answer all questions with a black lead pencil. You'll find detailed instructions for answering the census in the enclosed guide. If you need additional help, call the toll-free telephone number to the left, near your address.

**Please answer and return your form promptly.**

Complete your form and return it by April 1, 1990 in the postage-paid envelope provided. Avoid the inconvenience of having a census taker visit your home.

Again, thank you for answering the 1990 Census.  
**Remember: Return the completed form by April 1, 1990.**

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**Para personas de habla hispana --**

(For Spanish-speaking persons)

Si usted desea un cuestionario del censo en español, llame sin cargo alguno al siguiente número: **1-800-CUENTAN**  
(o sea 1-800-283-6826)

U.S. Department of Commerce  
BUREAU OF THE CENSUS  
FORM D-2

OMB No. 0607-0628  
Approval Expires 07/31/91

**Page 1**

The 1990 census must count every person at his or her "usual residence." This means the place where the person lives and sleeps most of the time.

**1a. List on the numbered lines below the name of each person living here on Sunday, April 1, including all persons staying here who have no other home. If EVERYONE at this address is staying here temporarily and usually lives somewhere else, follow the instructions given in question 1b below.**

**Include**

- Everyone who usually lives here such as family members, housemates and roommates, foster children, roomers, boarders, and live-in employees
- Persons who are temporarily away on a business trip, on vacation, or in a general hospital
- College students who stay here while attending college
- Persons in the Armed Forces who live here
- Newborn babies still in the hospital
- Children in boarding schools below the college level
- Persons who stay here most of the week while working even if they have a home somewhere else
- Persons with no other home who are staying here on April 1

**Do NOT include**

- Persons who usually live somewhere else
- Persons who are away in an institution such as a prison, mental hospital, or a nursing home
- College students who live somewhere else while attending college
- Persons in the Armed Forces who live somewhere else
- Persons who stay somewhere else most of the week while working

Print last name, first name, and middle initial for each person. Begin on line 1 with the household member (or one of the household members) in whose name this house or apartment is owned, being bought, or rented. If there is no such person, start on line 1 with any adult household member.

LAST	FIRST	INITIAL	LAST	FIRST	INITIAL
<b>1</b>			<b>7</b>		
<b>2</b>			<b>8</b>		
<b>3</b>			<b>9</b>		
<b>4</b>			<b>10</b>		
<b>5</b>			<b>11</b>		
<b>6</b>			<b>12</b>		

**1b. If EVERYONE is staying here only temporarily and usually lives somewhere else, list the name of each person on the numbered lines above, fill this circle  and print their usual address below. DO NOT PRINT THE ADDRESS LISTED ON THE FRONT COVER.**

House number	Street or road/Rural route and box number	Apartment number
City	State	ZIP Code
County or foreign country	Names of nearest intersecting streets or roads	

**NOW PLEASE OPEN THE FLAP TO PAGE 2 AND ANSWER ALL QUESTIONS FOR THE FIRST 7 PEOPLE LISTED. USE A BLACK LEAD PENCIL ONLY.**

PLEASE ALSO ANSWER HOUSING QUESTIONS ON PAGE 3

Please fill one column → for each person listed in Question 1a on page 1.	PERSON 1		PERSON 2																																																																																																																																																																																																					
	Last name		Last name																																																																																																																																																																																																					
	First name	Middle initial	First name	Middle initial																																																																																																																																																																																																				
<p><b>2. How is this person related to PERSON 1?</b></p> <p>Fill ONE circle for each person.</p> <p>If <b>Other relative</b> of person in column 1, fill circle and print exact relationship, such as mother-in-law, grandparent, son-in-law, niece, cousin, and so on.</p>	<p>START in this column with the household member (or one of the members) in whose name the home is owned, being bought, or rented.</p> <p>If there is no such person, start in this column with any adult household member.</p>		<p>If a <b>RELATIVE</b> of Person 1:</p> <p><input type="radio"/> Husband/wife      <input type="radio"/> Brother/sister</p> <p><input type="radio"/> Natural-born or adopted son/daughter      <input type="radio"/> Father/mother</p> <p><input type="radio"/> Stepson/stepdaughter      <input type="radio"/> Grandchild</p> <p><input type="radio"/> Other relative →</p> <hr/> <p>If <b>NOT RELATED</b> to Person 1:</p> <p><input type="radio"/> Roomer, boarder, or foster child      <input type="radio"/> Unmarried partner</p> <p><input type="radio"/> Housemate, roommate ■      <input type="radio"/> Other nonrelative</p>																																																																																																																																																																																																					
<p><b>3. Sex</b></p> <p>Fill ONE circle for each person.</p>	<input type="radio"/> Male <input type="radio"/> Female		<input type="radio"/> Male <input type="radio"/> Female																																																																																																																																																																																																					
<p><b>4. Race</b></p> <p>Fill ONE circle for the race that the person considers himself/herself to be.</p> <p>If <b>Indian (Amer.)</b>, print the name of the enrolled or principal tribe. →</p> <p>If <b>Other Asian or Pacific Islander (API)</b>, print one group, for example: Hmong, Fijian, Laotian, Thai, Tongan, Pakistani, Cambodian, and so on. →</p> <p>If <b>Other race</b>, print race. →</p>	<input type="radio"/> White <input type="radio"/> Black or Negro <input type="radio"/> Indian (Amer.) (Print the name of the enrolled or principal tribe.) → <input type="radio"/> Eskimo <input type="radio"/> Aleut <input type="radio"/> Asian or Pacific Islander (API) <input type="radio"/> Chinese <input type="radio"/> Japanese <input type="radio"/> Filipino ■ <input type="radio"/> Asian Indian <input type="radio"/> Hawaiian <input type="radio"/> Samoan <input type="radio"/> Korean <input type="radio"/> Guamanian <input type="radio"/> Vietnamese <input type="radio"/> Other API → <input type="radio"/> Other race (Print race) →		<input type="radio"/> White <input type="radio"/> Black or Negro <input type="radio"/> Indian (Amer.) (Print the name of the enrolled or principal tribe.) → <input type="radio"/> Eskimo <input type="radio"/> Aleut <input type="radio"/> Asian or Pacific Islander (API) <input type="radio"/> Chinese <input type="radio"/> Japanese <input type="radio"/> Filipino ■ <input type="radio"/> Asian Indian <input type="radio"/> Hawaiian <input type="radio"/> Samoan <input type="radio"/> Korean <input type="radio"/> Guamanian <input type="radio"/> Vietnamese <input type="radio"/> Other API → <input type="radio"/> Other race (Print race) →																																																																																																																																																																																																					
<p><b>5. Age and year of birth</b></p> <p>a. Print each person's age at last birthday. Fill in the matching circle below each box.</p> <p>b. Print each person's year of birth and fill the matching circle below each box.</p>	<p>a. Age</p> <table border="1"> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>1</td><td>1</td><td>1</td><td>1</td></tr> <tr><td>2</td><td>2</td><td>2</td><td>2</td></tr> <tr><td>3</td><td>3</td><td>3</td><td>3</td></tr> <tr><td>4</td><td>4</td><td>4</td><td>4</td></tr> <tr><td>5</td><td>5</td><td>5</td><td>5</td></tr> <tr><td>6</td><td>6</td><td>6</td><td>6</td></tr> <tr><td>7</td><td>7</td><td>7</td><td>7</td></tr> <tr><td>8</td><td>8</td><td>8</td><td>8</td></tr> <tr><td>9</td><td>9</td><td>9</td><td>9</td></tr> </table> <p>b. Year of birth</p> <table border="1"> <tr><td>1</td><td>8</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>9</td><td>1</td><td>0</td><td>1</td><td>0</td><td>0</td></tr> <tr><td>2</td><td>2</td><td>3</td><td>3</td><td>3</td><td>3</td></tr> <tr><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td></tr> <tr><td>5</td><td>5</td><td>5</td><td>5</td><td>5</td><td>5</td></tr> <tr><td>6</td><td>6</td><td>6</td><td>6</td><td>6</td><td>6</td></tr> <tr><td>7</td><td>7</td><td>7</td><td>7</td><td>7</td><td>7</td></tr> <tr><td>8</td><td>8</td><td>8</td><td>8</td><td>8</td><td>8</td></tr> <tr><td>9</td><td>9</td><td>9</td><td>9</td><td>9</td><td>9</td></tr> </table>						0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8	8	9	9	9	9	1	8	0	0	0	0	9	1	0	1	0	0	2	2	3	3	3	3	4	4	4	4	4	4	5	5	5	5	5	5	6	6	6	6	6	6	7	7	7	7	7	7	8	8	8	8	8	8	9	9	9	9	9	9	<p>a. Age</p> <table border="1"> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>1</td><td>1</td><td>1</td><td>1</td></tr> <tr><td>2</td><td>2</td><td>2</td><td>2</td></tr> <tr><td>3</td><td>3</td><td>3</td><td>3</td></tr> <tr><td>4</td><td>4</td><td>4</td><td>4</td></tr> <tr><td>5</td><td>5</td><td>5</td><td>5</td></tr> <tr><td>6</td><td>6</td><td>6</td><td>6</td></tr> <tr><td>7</td><td>7</td><td>7</td><td>7</td></tr> <tr><td>8</td><td>8</td><td>8</td><td>8</td></tr> <tr><td>9</td><td>9</td><td>9</td><td>9</td></tr> </table> <p>b. Year of birth</p> <table border="1"> <tr><td>1</td><td>8</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>9</td><td>1</td><td>0</td><td>1</td><td>0</td><td>0</td></tr> <tr><td>2</td><td>2</td><td>3</td><td>3</td><td>3</td><td>3</td></tr> <tr><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td></tr> <tr><td>5</td><td>5</td><td>5</td><td>5</td><td>5</td><td>5</td></tr> <tr><td>6</td><td>6</td><td>6</td><td>6</td><td>6</td><td>6</td></tr> <tr><td>7</td><td>7</td><td>7</td><td>7</td><td>7</td><td>7</td></tr> <tr><td>8</td><td>8</td><td>8</td><td>8</td><td>8</td><td>8</td></tr> <tr><td>9</td><td>9</td><td>9</td><td>9</td><td>9</td><td>9</td></tr> </table>						0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8	8	9	9	9	9	1	8	0	0	0	0	9	1	0	1	0	0	2	2	3	3	3	3	4	4	4	4	4	4	5	5	5	5	5	5	6	6	6	6	6	6	7	7	7	7	7	7	8	8	8	8	8	8	9	9	9	9	9	9
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9	9	9	9	9	9																																																																																																																																																																																																			
<p><b>6. Marital status</b></p> <p>Fill ONE circle for each person.</p>	<input type="radio"/> Now married <input type="radio"/> Separated <input type="radio"/> Widowed <input type="radio"/> Never married <input type="radio"/> Divorced		<input type="radio"/> Now married <input type="radio"/> Separated <input type="radio"/> Widowed <input type="radio"/> Never married <input type="radio"/> Divorced																																																																																																																																																																																																					
<p><b>7. Is this person of Spanish/Hispanic origin?</b></p> <p>Fill ONE circle for each person.</p> <p>If <b>Yes, other Spanish/Hispanic</b>, print one group. →</p>	<input type="radio"/> No (not Spanish/Hispanic) <input type="radio"/> Yes, Mexican, Mexican-Am., Chicano <input type="radio"/> Yes, Puerto Rican ■ <input type="radio"/> Yes, Cuban <input type="radio"/> Yes, other Spanish/Hispanic (Print one group, for example: Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.) →		<input type="radio"/> No (not Spanish/Hispanic) <input type="radio"/> Yes, Mexican, Mexican-Am., Chicano <input type="radio"/> Yes, Puerto Rican <input type="radio"/> Yes, Cuban <input type="radio"/> Yes, other Spanish/Hispanic (Print one group, for example: Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.) →																																																																																																																																																																																																					
<p><b>FOR CENSUS USE</b> →</p>	<input type="radio"/> <input type="radio"/>		<input type="radio"/> <input type="radio"/>																																																																																																																																																																																																					

**PERSON 7**

Last name \_\_\_\_\_  
 First name \_\_\_\_\_ Middle initial \_\_\_\_\_

If a RELATIVE of Person 1:

Husband/wife     Brother/sister  
 Natural-born or adopted son/daughter     Father/mother or Grandchild  
 Stepson/stepdaughter     Other relative

If NOT RELATED to Person 1:

Roomer, boarder, or foster child     Unmarried partner  
 Housemate, roommate     Other nonrelative

Male     Female

White  
 Black or Negro  
 Indian (Amer.) (Print the name of the enrolled or principal tribe.)  
 Eskimo  
 Aleut  
 Asian or Pacific Islander (API)  
 Chinese     Japanese  
 Filipino     Asian Indian  
 Hawaiian     Samoan  
 Korean     Guamanian  
 Vietnamese     Other API  
 Other race (Print race)

a. Age    b. Year of birth

0	0	0	0	1	8	0	0	0	0
1	1	1	1	9	9	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9

Now married     Separated  
 Widowed     Never married  
 Divorced

No (not Spanish/Hispanic)  
 Yes, Mexican, Mexican-Am., Chicano  
 Yes, Puerto Rican  
 Yes, Cuban  
 Yes, other Spanish/Hispanic (Print one group, for example: Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.)

**NOW PLEASE ANSWER QUESTIONS H1a-H26 FOR THIS HOUSEHOLD**

**H1a.** Did you leave anyone out of your list of persons for Question 1a on page 1 because you were not sure if the person should be listed — for example, someone temporarily away on a business trip or vacation, a newborn baby still in the hospital, or a person who stays here once in a while and has no other home?

Yes, please print the name(s) and reason(s).  
 \_\_\_\_\_

No

**b.** Did you include anyone in your list of persons for Question 1a on page 1 even though you were not sure that the person should be listed — for example, a visitor who is staying here temporarily or a person who usually lives somewhere else?

Yes, please print the name(s) and reason(s).  
 \_\_\_\_\_

No

If this is a ONE-FAMILY HOUSE —

**H5a.** Is this house on ten or more acres?

Yes     No

**b.** Is there a business (such as a store or barber shop) or a medical office on this property?

Yes     No

Answer only if you or someone in this household OWNS OR IS BUYING this house or apartment —

**H6.** What is the value of this property; that is, how much do you think this house and lot or condominium unit would sell for if it were for sale?

<input type="radio"/> Less than \$10,000	<input type="radio"/> \$70,000 to \$74,999
<input type="radio"/> \$10,000 to \$14,999	<input type="radio"/> \$75,000 to \$79,999
<input type="radio"/> \$15,000 to \$19,999	<input type="radio"/> \$80,000 to \$89,999
<input type="radio"/> \$20,000 to \$24,999	<input type="radio"/> \$90,000 to \$99,999
<input type="radio"/> \$25,000 to \$29,999	<input type="radio"/> \$100,000 to \$124,999
<input type="radio"/> \$30,000 to \$34,999	<input type="radio"/> \$125,000 to \$149,999
<input type="radio"/> \$35,000 to \$39,999	<input type="radio"/> \$150,000 to \$174,999
<input type="radio"/> \$40,000 to \$44,999	<input type="radio"/> \$175,000 to \$199,999
<input type="radio"/> \$45,000 to \$49,999	<input type="radio"/> \$200,000 to \$249,999
<input type="radio"/> \$50,000 to \$54,999	<input type="radio"/> \$250,000 to \$299,999
<input type="radio"/> \$55,000 to \$59,999	<input type="radio"/> \$300,000 to \$399,999
<input type="radio"/> \$60,000 to \$64,999	<input type="radio"/> \$400,000 to \$499,999
<input type="radio"/> \$65,000 to \$69,999	<input type="radio"/> \$500,000 or more

**H2.** Which best describes this building? Include all apartments, flats, etc., even if vacant.

A mobile home or trailer  
 A one-family house detached from any other house  
 A one-family house attached to one or more houses  
 A building with 2 apartments  
 A building with 3 or 4 apartments  
 A building with 5 to 9 apartments  
 A building with 10 to 19 apartments  
 A building with 20 to 49 apartments  
 A building with 50 or more apartments  
 Other

Answer only if you PAY RENT for this house or apartment —

**H7a.** What is the monthly rent?

<input type="radio"/> Less than \$80	<input type="radio"/> \$375 to \$399
<input type="radio"/> \$80 to \$99	<input type="radio"/> \$400 to \$424
<input type="radio"/> \$100 to \$124	<input type="radio"/> \$425 to \$449
<input type="radio"/> \$125 to \$149	<input type="radio"/> \$450 to \$474
<input type="radio"/> \$150 to \$174	<input type="radio"/> \$475 to \$499
<input type="radio"/> \$175 to \$199	<input type="radio"/> \$500 to \$524
<input type="radio"/> \$200 to \$224	<input type="radio"/> \$525 to \$549
<input type="radio"/> \$225 to \$249	<input type="radio"/> \$550 to \$599
<input type="radio"/> \$250 to \$274	<input type="radio"/> \$600 to \$649
<input type="radio"/> \$275 to \$299	<input type="radio"/> \$650 to \$699
<input type="radio"/> \$300 to \$324	<input type="radio"/> \$700 to \$749
<input type="radio"/> \$325 to \$349	<input type="radio"/> \$750 to \$999
<input type="radio"/> \$350 to \$374	<input type="radio"/> \$1,000 or more

**H3.** How many rooms do you have in this house or apartment? Do NOT count bathrooms, porches, balconies, foyers, halls, or half-rooms.

1 room     4 rooms     7 rooms  
 2 rooms     5 rooms     8 rooms  
 3 rooms     6 rooms     9 or more rooms

**b.** Does the monthly rent include any meals?

Yes     No

**FOR CENSUS USE**

<b>A. Total persons</b>	<b>B. Type of unit</b>		<b>D. Months vacant</b>		<b>G. DO</b>		<b>ID</b>	
	Occupied	Vacant	<input type="radio"/> Less than 1	<input type="radio"/> 6 up to 12				
	<input type="radio"/> First form	<input type="radio"/> Regular	<input type="radio"/> 1 up to 2	<input type="radio"/> 12 up to 24				
	<input type="radio"/> Cont'n	<input type="radio"/> Usual home elsewhere	<input type="radio"/> 2 up to 6	<input type="radio"/> 24 or more				
	<b>C1. Vacancy status</b>		<b>E. Complete after</b>					
	<input type="radio"/> For rent	<input type="radio"/> For seas/rec/occ	<input type="radio"/> LR	<input type="radio"/> TC	<input type="radio"/> QA	<input type="radio"/> JIC 1		
	<input type="radio"/> For sale only	<input type="radio"/> Rented or sold, not occupied	<input type="radio"/> P/F	<input type="radio"/> RE	<input type="radio"/> I/T	<input type="radio"/>		
	<input type="radio"/> Other vacant	<input type="radio"/>	<input type="radio"/> MV	<input type="radio"/> ED	<input type="radio"/> EN	<input type="radio"/>		
	<b>C2. Is this unit boarded up?</b>		<input type="radio"/> P0	<input type="radio"/> P3	<input type="radio"/> P6	<input type="radio"/>		
	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> P1	<input type="radio"/> P4	<input type="radio"/> IA	<input type="radio"/> JIC 2		
			<input type="radio"/> P2	<input type="radio"/> P5	<input type="radio"/> SM	<input type="radio"/>		
			<b>F. Cov.</b>					
			<input type="radio"/> 1b	<input type="radio"/> 1a	<input type="radio"/> 7	<input type="radio"/> H1		

<p><b>H8.</b> When did the person listed in column 1 on page 2 move into this house or apartment?</p> <p><input type="radio"/> 1989 or 1990  <input type="radio"/> 1985 to 1988  <input type="radio"/> 1980 to 1984  <input type="radio"/> 1970 to 1979  <input type="radio"/> 1960 to 1969  <input type="radio"/> 1959 or earlier</p>	<p><b>H14.</b> Which FUEL is used MOST for heating this house or apartment?</p> <p><input type="radio"/> Gas: from underground pipes serving the neighborhood  <input type="radio"/> Gas: bottled, tank, or LP  <input type="radio"/> Electricity  <input type="radio"/> Fuel oil, kerosene, etc.  <input type="radio"/> Coal or coke  <input type="radio"/> Wood  <input type="radio"/> Solar energy  <input type="radio"/> Other fuel  <input type="radio"/> No fuel used</p>	<p><b>H20.</b> What are the yearly costs of utilities and fuels for this house or apartment? If you have lived here less than 1 year, estimate the yearly cost.</p> <p><b>a. Electricity</b></p> <p style="text-align: center;">\$ _____ .00 Yearly cost — Dollars</p> <p style="text-align: center;">OR</p> <p><input type="radio"/> Included in rent or in condominium fee  <input type="radio"/> No charge or electricity not used</p>
<p><b>H9.</b> How many bedrooms do you have; that is, how many bedrooms would you list if this house or apartment were on the market for sale or rent?</p> <p><input type="radio"/> No bedroom  <input type="radio"/> 1 bedroom  <input type="radio"/> 2 bedrooms  <input type="radio"/> 3 bedrooms  <input type="radio"/> 4 bedrooms  <input type="radio"/> 5 or more bedrooms</p>	<p><b>H15.</b> Do you get water from —</p> <p><input type="radio"/> A public system such as a city water department, or private company?  <input type="radio"/> An individual drilled well?  <input type="radio"/> An individual dug well?  <input type="radio"/> Some other source such as a spring, creek, river, cistern, etc.?</p>	<p><b>b. Gas</b></p> <p style="text-align: center;">\$ _____ .00 Yearly cost — Dollars</p> <p style="text-align: center;">OR</p> <p><input type="radio"/> Included in rent or in condominium fee  <input type="radio"/> No charge or gas not used</p>
<p><b>H10.</b> Do you have COMPLETE plumbing facilities in this house or apartment; that is, 1) hot and cold piped water, 2) a flush toilet, and 3) a bathtub or shower?</p> <p><input type="radio"/> Yes, have all three facilities  <input type="radio"/> No</p>	<p><b>H16.</b> Is this building connected to a public sewer?</p> <p><input type="radio"/> Yes, connected to public sewer  <input type="radio"/> No, connected to septic tank or cesspool  <input type="radio"/> No, use other means</p>	<p><b>c. Water</b></p> <p style="text-align: center;">\$ _____ .00 Yearly cost — Dollars</p> <p style="text-align: center;">OR</p> <p><input type="radio"/> Included in rent or in condominium fee  <input type="radio"/> No charge</p>
<p><b>H11.</b> Do you have COMPLETE kitchen facilities; that is, 1) a sink with piped water, 2) a range or cookstove, and 3) a refrigerator?</p> <p><input type="radio"/> Yes  <input type="radio"/> No</p>	<p><b>H17.</b> About when was this building first built?</p> <p><input type="radio"/> 1989 or 1990  <input type="radio"/> 1985 to 1988  <input type="radio"/> 1980 to 1984  <input type="radio"/> 1970 to 1979  <input type="radio"/> 1960 to 1969  <input type="radio"/> 1950 to 1959  <input type="radio"/> 1940 to 1949  <input type="radio"/> 1939 or earlier  <input type="radio"/> Don't know</p>	<p><b>d. Oil, coal, kerosene, wood, etc.</b></p> <p style="text-align: center;">\$ _____ .00 Yearly cost — Dollars</p> <p style="text-align: center;">OR</p> <p><input type="radio"/> Included in rent or in condominium fee  <input type="radio"/> No charge or these fuels not used</p>
<p><b>H12.</b> Do you have a telephone in this house or apartment?</p> <p><input type="radio"/> Yes  <input type="radio"/> No</p>	<p><b>H18.</b> Is this house or apartment part of a condominium?</p> <p><input type="radio"/> Yes  <input type="radio"/> No</p>	
<p><b>H13.</b> How many automobiles, vans, and trucks of one-ton capacity or less are kept at home for use by members of your household?</p> <p><input type="radio"/> None  <input type="radio"/> 1  <input type="radio"/> 2  <input type="radio"/> 3  <input type="radio"/> 4  <input type="radio"/> 5  <input type="radio"/> 6  <input type="radio"/> 7 or more</p>	<p style="text-align: center;"><i>If you live in an apartment building, skip to H20.</i></p> <p><b>H19a.</b> Is this house on less than 1 acre?</p> <p><input type="radio"/> Yes — Skip to H20  <input type="radio"/> No</p> <p><b>b.</b> In 1989, what were the actual sales of all agricultural products from this property?</p> <p><input type="radio"/> None  <input type="radio"/> \$1 to \$999  <input type="radio"/> \$1,000 to \$2,499  <input type="radio"/> \$2,500 to \$4,999  <input type="radio"/> \$5,000 to \$9,999  <input type="radio"/> \$10,000 or more</p>	

**QUESTIONS FOR YOUR HOUSEHOLD**

**INSTRUCTION:**  
 Answer questions H21 TO H26, if this is a one-family house, a condominium, or a mobile home that someone in this household OWNS OR IS BUYING; otherwise, go to page 6.

**H21. What were the real estate taxes on THIS property last year?**

\$            .00  
 Yearly amount — Dollars

OR

None

**H22. What was the annual payment for fire, hazard, and flood insurance on THIS property?**

\$            .00  
 Yearly amount — Dollars

OR

None

**H23a. Do you have a mortgage, deed of trust, contract to purchase, or similar debt on THIS property?**

Yes, mortgage, deed of trust, or similar debt } *Go to H23b*  
 Yes, contract to purchase }  
 No — Skip to H24a

**b. How much is your regular monthly mortgage payment on THIS property? Include payment only on first mortgage or contract to purchase.**

\$            .00  
 Monthly amount — Dollars

OR

No regular payment required — Skip to H24a

**c. Does your regular monthly mortgage payment include payments for real estate taxes on THIS property?**

Yes, taxes included in payment  
 No, taxes paid separately or taxes not required

**d. Does your regular monthly mortgage payment include payments for fire, hazard, or flood insurance on THIS property?**

Yes, insurance included in payment  
 No, insurance paid separately or no insurance

**H24a. Do you have a second or junior mortgage or a home equity loan on THIS property?**

Yes  
 No — Skip to H25

**b. How much is your regular monthly payment on all second or junior mortgages and all home equity loans?**

\$            .00  
 Monthly amount — Dollars

OR

No regular payment required

*Answer ONLY if this is a CONDOMINIUM —*

**H25. What is the monthly condominium fee?**

\$            .00  
 Monthly amount — Dollars

*Answer ONLY if this is a MOBILE HOME —*

**H26. What was the total cost for personal property taxes, site rent, registration fees, and license fees on this mobile home and its site last year? Exclude real estate taxes.**

\$            .00  
 Yearly amount — Dollars

*Please turn to page 6.* →

9  
8  
7  
6  
5  
4  
3  
2  
1  
0



**23a. How did this person usually get to work LAST WEEK?** If this person usually used more than one method of transportation during the trip, fill the circle of the one used for most of the distance.

Car, truck, or van     Motorcycle  
 Bus or trolley bus     Bicycle  
 Streetcar or trolley car     Walked  
 Subway or elevated     Worked at home  
 Railroad     Skip to 28  
 Ferryboat     Other method  
 Taxicab

*If "car, truck, or van" is marked in 23a, go to 23b. Otherwise, skip to 24a.*

**b. How many people, including this person, usually rode to work in the car, truck, or van LAST WEEK?**

Drove alone     5 people  
 2 people     6 people  
 3 people     7 to 9 people  
 4 people     10 or more people

**24a. What time did this person usually leave home to go to work LAST WEEK?**

a.m.  
 p.m.

**b. How many minutes did it usually take this person to get from home to work LAST WEEK?**

Minutes — Skip to 28

**25. Was this person TEMPORARILY absent or on layoff from a job or business LAST WEEK?**

Yes, on layoff  
 Yes, on vacation, temporary illness, labor dispute, etc.  
 No

**26a. Has this person been looking for work during the last 4 weeks?**

Yes  
 No — Skip to 27

**b. Could this person have taken a job LAST WEEK if one had been offered?**

No, already has a job  
 No, temporarily ill  
 No, other reasons (in school, etc.)  
 Yes, could have taken a job

**27. When did this person last work, even for a few days?**

1990     1980 to 1984  
 1989     1979 or earlier  
 1988     Never worked  
 1985 to 1987

*Go to 28*

**28-30. CURRENT OR MOST RECENT JOB ACTIVITY.** Describe clearly this person's chief job activity or business last week. If this person had more than one job, describe the one at which this person worked the most hours. If this person had no job or business last week, give information for his/her last job or business since 1985.

**28. Industry or Employer**

**a. For whom did this person work?** If now on active duty in the Armed Forces, fill this circle  and print the branch of the Armed Forces.

(Name of company, business, or other employer)

**b. What kind of business or industry was this?** Describe the activity at location where employed.

(For example: hospital, newspaper publishing, mail order house, auto engine manufacturing, retail bakery)

**c. Is this mainly — Fill ONE circle**

Manufacturing     Other (agriculture, construction, service, government, etc.)  
 Wholesale trade  
 Retail trade

**29. Occupation**

**a. What kind of work was this person doing?**

(For example: registered nurse, personnel manager, supervisor of order department, gasoline engine assembler, cake icer)

**b. What were this person's most important activities or duties?**

(For example: patient care, directing hiring policies, supervising order clerks, assembling engines, icing cakes)

**30. Was this person — Fill ONE circle**

Employee of a PRIVATE FOR PROFIT company or business or of an individual, for wages, salary, or commissions  
 Employee of a PRIVATE NOT-FOR-PROFIT, tax-exempt, or charitable organization  
 Local GOVERNMENT employee (city, county, etc.)  
 State GOVERNMENT employee  
 Federal GOVERNMENT employee  
 SELF-EMPLOYED in own NOT INCORPORATED business, professional practice, or farm  
 SELF-EMPLOYED in own INCORPORATED business, professional practice, or farm  
 Working WITHOUT PAY in family business or farm

**31a. Last year (1989), did this person work, even for a few days, at a paid job or in a business or farm?**

Yes  
 No — Skip to 32

**b. How many weeks did this person work in 1989?** Count paid vacation, paid sick leave, and military service.

Weeks

**c. During the weeks WORKED in 1989, how many hours did this person usually work each week?**

Hours

**32. INCOME IN 1989 —** Fill the "Yes" circle below for each income source received during 1989. Otherwise, fill the "No" circle. If "Yes," enter the total amount received during 1989. For income received jointly, see instruction guide. If exact amount is not known, please give best estimate. If net income was a loss, write "Loss" above the dollar amount.

**a. Wages, salary, commissions, bonuses, or tips from all jobs — Report amount before deductions for taxes, bonds, dues, or other items.**

Yes  
 No    \$  .00  
 Annual amount — Dollars

**b. Self-employment income from own nonfarm business, including proprietorship and partnership — Report NET income after business expenses.**

Yes  
 No    \$  .00  
 Annual amount — Dollars

**c. Farm self-employment income — Report NET income after operating expenses. Include earnings as a tenant farmer or sharecropper.**

Yes  
 No    \$  .00  
 Annual amount — Dollars

**d. Interest, dividends, net rental income or royalty income, or income from estates and trusts — Report even small amounts credited to an account.**

Yes  
 No    \$  .00  
 Annual amount — Dollars

**e. Social Security or Railroad Retirement**

Yes  
 No    \$  .00  
 Annual amount — Dollars

**f. Supplemental Security Income (SSI), Aid to Families with Dependent Children (AFDC), or other public assistance or public welfare payments.**

Yes  
 No    \$  .00  
 Annual amount — Dollars

**g. Retirement, survivor, or disability pensions — Do NOT include Social Security.**

Yes  
 No    \$  .00  
 Annual amount — Dollars

**h. Any other sources of income received regularly such as Veterans' (VA) payments, unemployment compensation, child support, or alimony — Do NOT include lump-sum payments such as money from an inheritance or the sale of a home.**

Yes  
 No    \$  .00  
 Annual amount — Dollars

**33. What was this person's total income in 1989?** Add entries in questions 32a through 32h; subtract any losses. If total amount was a loss, write "Loss" above amount.

None OR \$  .00  
 Annual amount — Dollars

Please turn the page and answer questions for Person 2 listed on page 1. If this is the last person listed in question 1a on page 1, go to the back of the form.

# CHAPTER 3. Procedures

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## QUESTIONNAIRE DESIGN AND USE

The Census Bureau designed two primary types of questionnaires for the 1990 census:

1. The short form with a limited number of basic population and housing questions ("100-percent" questions)
2. The long form (shown at the end of chapter 2) containing the 100-percent questions plus additional questions on population and housing ("sample" questions)

## INTRODUCTION

This chapter describes the two primary types of questionnaires that were used in the 1990 census: the short form with a limited number of population and housing questions and a longer form that included all the questions on the short form plus additional questions about the housing unit and members of the household. The long form was filled out by a "sample" of the population.

It also describes the efforts made to enlist public cooperation in answering the census, including extensive advertising programs to encourage minority participation and assistance in filling out the questionnaires.

The chapter then covers the key data collection procedures used in the 1990 census, from compiling address lists to following up on questionnaires not returned. The more traditional methods of data collection are covered (mailout/ mailback, list/ enumerate) in addition to special counts of people living in group quarters, those aboard ships or living abroad, and a new update/ leave procedure. For the 1990 census, expanded efforts were made to enumerate selected shelters and street locations where homeless people could be found, and a parolee/ probationer coverage improvement program was instituted for the first time.

Also covered are the procedures for processing the returns (a process made more efficient by the establishment of seven processing offices, four more than for the 1980 census, and the use of bar code technology to accelerate and improve control of the questionnaire check-in operation).

The questionnaires were designed to be understood and completed without enumerator assistance. They were printed with a machine-readable bar code that identified the basic geographic codes related to the location of the housing unit. Space was provided for up to seven respondents.

Both questionnaires were printed in English for general distribution and in Spanish for distribution upon request. In addition, instruction sheets in English or Spanish accompanied the questionnaires. The Census Bureau also prepared language guides containing translations of the basic



*A few rolls of 1990 questionnaires—before cutting, folding, and stapling*

population and housing questions in 32 languages for use by enumerators at households where English was not spoken.

Special questionnaires, such as the Military, Shipboard, and Individual Census Reports, were used for the enumeration of persons in the Armed Forces, on board ship, or living in institutions, college dormitories, etc.

The questionnaires were sent for printing beginning in the spring of 1989, though Census Day was not until April 1, 1990. The long lead time was necessary, in part, because of the large number of questionnaires to be printed (274 million, along with instruction guides, motivational inserts, and return envelopes that were included in the mailing packet) and the exacting standards necessary to produce copies suitable for machine-readable processing. These packets were delivered to local post offices in March 1990 for delivery. The following sections describe the questionnaires and related sampling schemes.

## Types of Questionnaires

**Short Form**—About 83 percent of all housing units were enumerated on this type of form. Completing this 14-question form (some questions had multiple parts) took about 15 minutes for the members of an average-size household.

**Long Form**—Approximately 17.7 million housing units (about 17 percent) out of a total of 102.3 million housing units, or 1-in-6 housing units, received a long form. In 1980, 19 percent of housing units received a long form. The long form (also called the sample questionnaire) contained all 14 questions found on the short form plus additional questions about each member of the household and the housing unit for a total of 59 questions (some with multiple parts). Because some persons, as instructed, skipped some questions not appropriate for them, no individual answered all the questions. For the average household, completing this form took about 43 minutes. The long form results were weighted to provide data approximating those that would have resulted if every household had completed the long form.

## Tabulations of 100-Percent and Sample Data

**100-Percent Data**—These data are prepared by tabulating responses to the 14 basic questions that appear on both the short and long forms. Their preparation, therefore, involves the processing of all short-form questionnaires and the 100-percent questions found on the long forms.

Data are needed on a 100-percent basis for several reasons:

- A complete count of the population is necessary to determine apportionment of congressional seats among States and for redistricting within States to assure equal representation.
- Accurate statistics for small areas, such as blocks, are possible only from 100-percent data.

- Figures from the 100-percent tabulation serve as control figures when sample data are inflated to represent the total population.

**Sample Data**—Sample data are prepared by tabulating responses to the questions that appear on the long forms, including both the 100-percent questions and the additional sample questions. This allows responses to the 100-percent questions to be cross tabulated with responses to the sample questions, which appear only on the long form. For example, this permits preparation of tabulations of race (a 100-percent item) by income (a sample item), or age (a 100-percent item) by educational attainment (a sample item).

Sample data prepared from the long forms are statistically weighted or inflated to produce estimates of what a complete enumeration would have produced. The amount of error present between a weighted figure, based on a sample, and the corresponding figure if the items were collected on a 100-percent basis varies depending upon the size of the sample and the population size of the area. In printed reports presenting sample data, there usually is a headnote under each table title to remind users that the data are based on a sample. (See ch. 6 for more information on sample weighting.)

## Sampling Techniques

The percentage of households receiving the long form depended upon the population size of the governmental unit. The sampling arrangement was as follows:

- **1-in-2**—A sample questionnaire was furnished to every other housing unit (a 1-in-2 sampling rate) located in small governmental units; namely, those having an estimated 1988 population of fewer than 2,500 people. These included approximately 19,000 incorporated places, counties, and related minor civil divisions (MCD's). (Note: This may have included some housing units in adjacent territory. Also, for this purpose, MCD's selected are those that tend to have a wide array of governmental functions in Connecticut, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Wisconsin. See ch. 4 for a full discussion of census geography.)
- **1-in-6**—In governmental units with more than 2,500 people, a sample questionnaire was furnished to one of every six housing units in census tracts and block numbering areas with estimated housing-unit counts under 2,000. A 1-in-6 rate was used for all of Puerto Rico as well as all group quarters.
- **1-in-8**—For the remainder of the country, except for the special cases noted below, sample questionnaires were sent to one of every eight housing units.
- **Special Cases**—American Indian reservations (including off-reservation trust lands), tribal jurisdiction statistical areas, and Alaska Native village statistical areas

were sampled like all other governmental units, except that the sampling rates varied according to the size of the American Indian and Alaska Native populations based on 1980 census data. (There were no intercensal estimates for these areas.) Trust lands were sampled according to the guidelines set for their associated American Indian reservations. Consequently, most American Indian and Alaska Native areas were designated for the 1-in-2 sample.

Because the Census Bureau recognized no incorporated places in Hawaii, census designated places in Hawaii were sampled at the same rate as governmental units. All questions in the Virgin Islands and the Pacific Outlying Areas were asked of all people and housing units; i.e., there were no sample questions.

Through this sample design, the Census Bureau reduced the total burden on respondents. It also maintained the levels of reliability for sample estimates as closely as possible to the 1980 census levels, particularly for the small areas provided for in the sample design and subpopulation groups of larger sample-design areas.

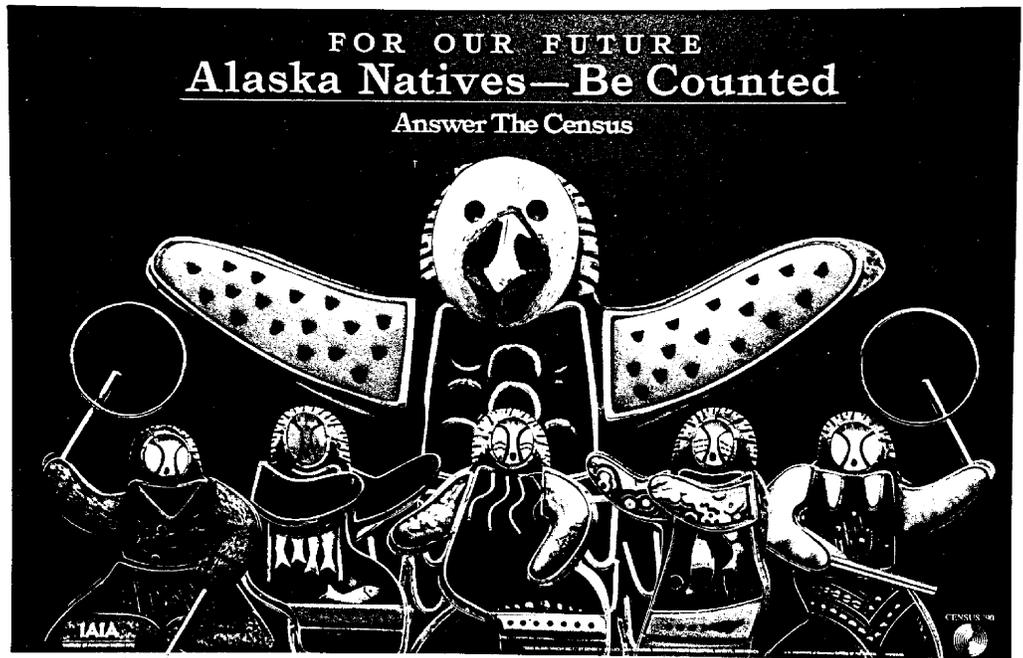
**OBTAINING PUBLIC COOPERATION**

The basic objective of the census is to achieve as complete a count of the population as possible. A key factor in reaching this goal is obtaining public cooperation. In preparation for the 1990 census, a number of programs and activities were implemented to encourage public awareness of the census, build public support, motivate people to fill out and return their forms, and educate people on how to complete the forms. Several of the programs were tried for the first time; others were improved or expanded versions of programs used in previous censuses. The programs ranged from designing public service announcements for national television audiences to establishing personal contact between local community leaders and the staff of the Census Bureau. These programs are summarized here.

**Extensive Use of the Media**

As with each census beginning with 1950, the Census Bureau contracted with the national Advertising Council to launch a public service advertising campaign. The Ad Council regularly handles major mass-media advertising campaigns for government and other nonprofit organizations.

One innovation for the 1990 census was to have the Ad Council arrange for the services of minority ad agencies to supplement the main advertising campaign and to appeal more directly to minority audiences. The Census Bureau



*A variety of posters encouraged minorities to participate in the census*

enlisted these agencies to design campaigns for Blacks, Hispanics, Asians and Pacific Islanders, and people living in Puerto Rico as well as a campaign for the general audience.

A cooperative agreement to encourage American Indians and Alaska Natives to participate in the 1990 census was entered into by the Census Bureau and the Institute of American Indian Arts (IAIA). The IAIA assisted the Census Bureau in developing a promotional campaign that included communications strategies and themes for use in promotional materials.

In the private sector, corporations and businesses responded to Census Bureau requests for use of corporate resources, such as running notices in employee newsletters and through monetary support, such as sponsoring openings, receptions, kickoffs, and other events. Radio stations were furnished census public service announcements and encouraged to air them. Free public service announcements, valued at \$68 million, were run on television, radio, and cable outlets and carried in newspapers nationwide between February and May 1990 to promote participation in the census. During this period, the average adult reached was exposed to 68 messages. Local television and radio stations accounted for nearly 70 percent of the total media value; and ethnic media, such as Black, Spanish language, and Asian/ Pacific Islander, accounted for 21 percent.

### **Special Efforts to Encourage Minority Participation**

In addition to the minority media campaigns, there were several other programs specially designed to encourage minority participation in the census. These programs also gave minority communities additional opportunities to participate in planning the census and furnished them with information on the availability and use of census statistics to help meet their needs.

The census advisory committee program has proven effective in past censuses. For 1990, there were four minority advisory committees representing the Black, Hispanic, Asian and Pacific Islander, and American Indian and Alaska Native Committee members. Committee members and conference attendees gave the Census Bureau advice and recommendations regarding 1990 census content and procedures and aided the Census Bureau in developing working relationships with minority organizations. They also helped acquaint their communities with the importance of being counted and contributed to community understanding of the census.

Through its National Services Program (NSP), the Census Bureau had extensive contact with national organizations that represent minorities or other segments of the population that historically have been undercounted in decennial censuses. More than 100 social service, business, professional, civil rights, educational, and religious groups participated in endorsing the census. NSP staff coordinated or conducted activities for these organizations to increase awareness of the importance of the census

and to assist them in obtaining and using census data. Many of these activities are continuing after the census, including briefings, periodic mailings of information about census data products and services, and an extensive program of census presentations, workshops, and exhibits at the national conferences of participating organizations.

The Census Awareness and Products Program (CAPP) was a special activity with a minority community focus. Through this program, the Census Bureau extended to the local level the type of contact accomplished at the national level through the NSP. The CAPP implemented a variety of outreach and promotional activities at the local level, particularly in hard-to-enumerate areas.

CAPP specialists were located in the 13 regional census centers and in other cities with large, hard-to-enumerate populations. At its peak in 1990, the staff numbered about 280 persons. They were people already familiar with the minority communities in which they worked. They received training about census procedures, the importance of accurate counts to minority communities, and how community organizations can use census statistics. Their activities included outreach to community groups, census booth staffing at local events, media relations, and similar efforts.

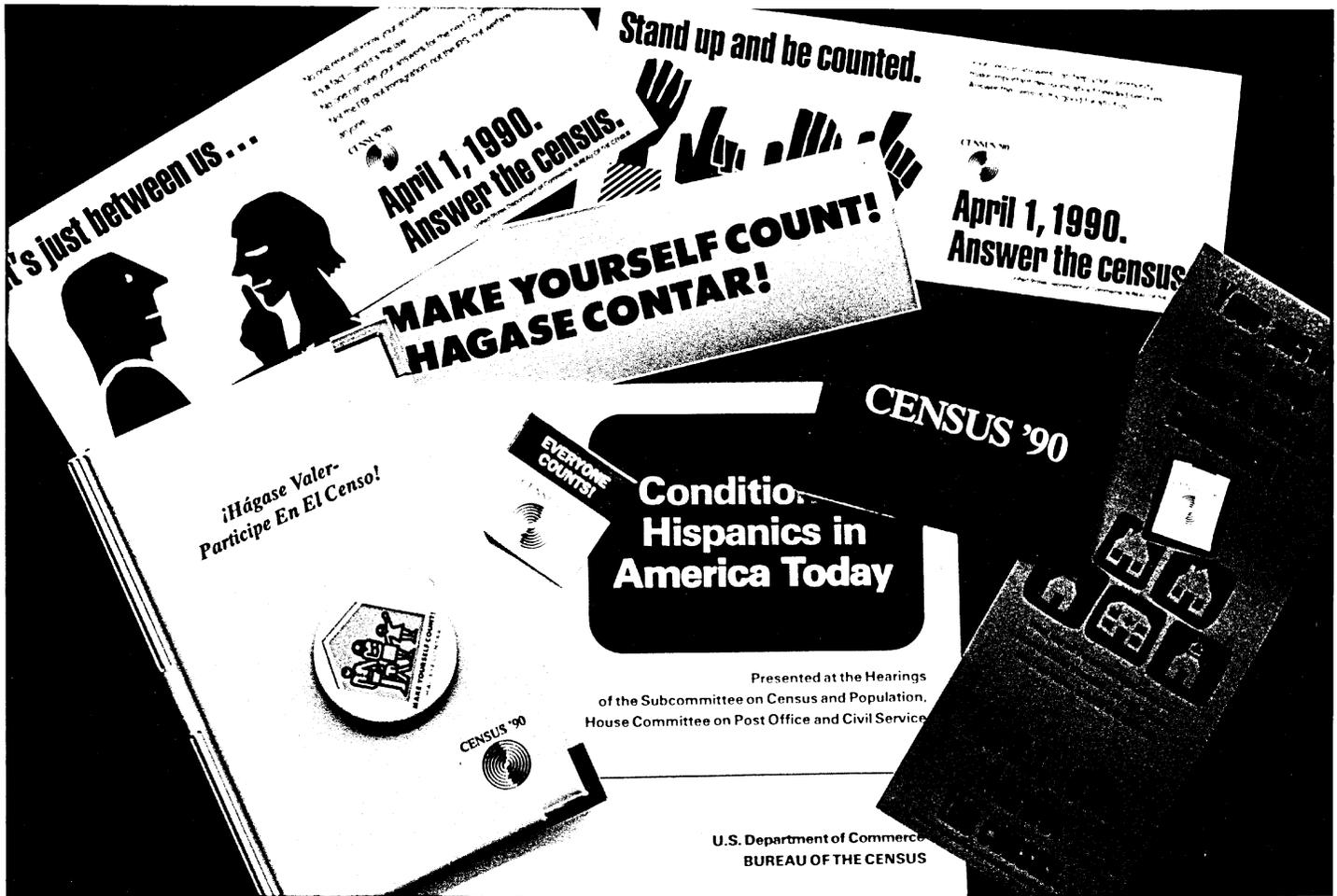
In an effort to obtain a complete count of American Indians and Alaska Natives, the Census Bureau established a tribal liaison program and an Alaska Native village liaison program. These programs encouraged tribal and Native village government officials to appoint individuals to work with the Census Bureau in developing outreach activities to encourage participation in the census. The Census Bureau also held 12 regional American Indian and Alaska Native meetings throughout the country from May 1985 to September 1986. A second round of meetings was held from October 1988 to the spring of 1989. They were attended by liaisons and others appointed by tribes and villages.

Special promotional materials also were prepared to reach minority population groups. These materials took the form of brochures, booklets, fliers, and posters available in eight languages. Subjects covered included employment opportunities, motivational material, assistance in filling out race and ancestry questions, and the confidentiality of responses.

### **Other Approaches to Increasing Public Cooperation**

The Census Bureau carried out several other efforts to increase public cooperation, all of which were aimed at both minority populations and the general population. The following were among the most important:

- *Complete Count Committees*—The mayors of about 350 cities met with Census Bureau officials in one-on-one meetings to discuss mutual concerns about the 1990



Fliers, buttons, and bumper stickers heightened census awareness

census and possible joint efforts, including efforts aimed specifically at minority communities, for encouraging the cities' populations to be counted in 1990. To assure ongoing contact between the cities and Census Bureau staff, mayors were asked to appoint high-level liaisons.

Communities also were encouraged to form "Complete Count Committees," headed by local leaders, to stress the importance of the census. They promoted the census to residents through local government departments, particularly those agencies with extensive public contacts, and augmented media programs, publicity, and promotions conducted by the Census Bureau. They also supported recruitment of employees to conduct the census.

- *Census Education Project*—The Census Bureau designed a curriculum promoting census awareness that it sent to every school district in 1989. The 1990 Census Education Project teaching kit was aimed at students in kindergarten through the 12th grade in approximately 106,000 public and private schools. Early distribution of the kits allowed schools to offer census lessons and activities in the 1989-90 school year. Each kit contained an Educator's Guide with information about the 1990 census, the history of census-taking in the United States,

and a glossary of terms. It included classroom lessons designed to introduce students to the purpose of the decennial census and how the data are collected, analyzed, and used in everyday life, as well as suggested activities to help promote census participation in the students' communities.

- *Head Start Agencies*—The Census Bureau worked closely with the national Head Start agency in a new effort for 1990 designed to reach low-income populations. The local Head Start agencies were asked to display a "Count Us In" poster, send flyers home with children, conduct workshops to help parents fill out questionnaires, telephone parents to encourage them to answer the census, and publicize the availability of census jobs.
- *Religious Organizations Project*—The Census Bureau contacted national church leaders and organizations, as well as individual local churches, to take advantage of their extensive network and outreach capabilities. The organizations were encouraged to promote community awareness by publicizing the goals of the census and the impact of an accurate census on their communities. They also provided use of their facilities for recruiting and testing purposes.

The preceding sections highlight the principal efforts of the Census Bureau to promote public willingness to respond to the census. The programs to reduce the undercount also resulted in improvements to the census-taking process, described in the following sections on collection procedures and count improvement efforts.

### Efforts to Encourage Mail Returns

Over several decades, the Census Bureau expanded its use of the mail in census-taking for several reasons:

1. The quality of responses to census questions improved because enumerators' biases were avoided, and respondents could complete the form at a convenient time and at their own pace
2. The mail census procedures involved multiple checks of address lists, which reduced the possibility of housing units being missed
3. The selection of housing units to receive sample questionnaires was better controlled, thereby ensuring a proper, unbiased sample
4. The computer assignment of geographic codes in TAR areas helped improve the accuracy of assignment of data to geographic areas
5. The mail census required fewer enumerators, resulting in a more efficient, economical census operation

In test censuses conducted prior to the 1990 census, the mail return rate was lower than for comparable tests prior to 1980. Several efforts were instituted to improve the anticipated response rates. In spite of these efforts, only 63 percent of the housing units to which questionnaires were mailed returned questionnaires, compared to 75 percent for the 1980 census.

- *Mail Reminder Cards*—A card proved effective in a test census in reminding householders to return their census questionnaires. Therefore, on March 30, 1990, a mail reminder card was sent to all residential addresses in the mailout/ mailback and update/ leave areas.
- *Motivational Inserts*—Research conducted after the 1980 census showed that the arrival of the census mailing package was the first some people had heard about the census. Thus, the census mailing package itself was a public information vehicle. In the test censuses, the effects of including a “motivational” insert in some of the questionnaire mailing packages was evaluated. The insert included colorful graphics and listed reasons “to count yourself in on the census.” The test results showed that the motivational insert could improve mail-return rates. A similar motivational insert was included in the mailing package for the 1990 census.
- *Special Motivational Mailing in Multilingual Areas*—In areas where it was anticipated that language and related barriers such as immigrant status might make enumeration difficult, a multilingual “early alert” brochure was

mailed prior to the questionnaire. This was a new effort for the 1990 census. The brochure had messages in English, Spanish, and six Asian languages (Vietnamese, Korean, Chinese, Cambodian, Laotian, and Thai). It told residents that a questionnaire was coming in the mail, asked them to fill it out and send it back, and told them how to get help in completing the questionnaire. It also contained messages stressing the importance and confidentiality of the census and a toll-free telephone number to receive assistance in their language.

- *Expanded Questionnaire Assistance Efforts*—Persons needing help in completing the questionnaire, or who did not receive a questionnaire, could call a toll-free telephone number or, in some areas, could visit a questionnaire assistance center. These centers were set up in densely settled communities where the Census Bureau felt assistance would be necessary. Both the telephone lines and the assistance centers were staffed with bilingual personnel. In addition, Spanish speaking persons were able to request a questionnaire in Spanish. (A message in Spanish appeared on all questionnaires explaining how to obtain one in Spanish.) Some enumerators were also bilingual and spoke the prevailing language in their assignment areas.
- *Early Delivery of Questionnaires*—In 1990, questionnaires were delivered up to 9 days before Census Day, instead of 4 days before as in 1980. Although this was done primarily to facilitate earlier processing, the early delivery (in conjunction with motivational mailings, reminder cards, and advertising concentrated in the week or so before Census Day), it was hoped, would encourage mail returns and promote improved data accuracy by giving residents more time to complete their questionnaires. It also allowed census staff more time to prepare complete lists of nonresponse housing units by using the automated address list to record which questionnaires had been returned and to determine households where enumerators had to make followup visits to gather missing or incomplete information. (See discussion of “Processing the Data” later in this chapter.)

### LOCAL REVIEW PROGRAM

The purpose of this program was to improve the accuracy of the census through the assistance of local governments in pinpointing such problems as clusters of housing units assigned to the wrong block or missed entirely, as well as incorrectly displayed jurisdictional boundaries.

The program was designed to give local officials an opportunity to—

1. Review the housing unit and special place counts that were compiled from address lists for governments in TAR and 1988 prelist areas in advance of the census.
2. Review the housing unit and group quarters population counts for all areas after most of the census collection effort was completed, yet before the counts became final and while the census district offices were still open.

In the summer of 1987, in preparation for this effort, the Census Bureau sent information about the program to the highest elected official of each of the 39,000 general-purpose local governmental jurisdictions. The officials were asked to appoint someone to work in a liaison capacity with the Census Bureau on this program. It was suggested that the person have technical knowledge of housing unit estimates or be familiar with the housing unit inventory of the jurisdiction. Contacts with local, tribal, and Alaska Native village officials began earlier than for the 1980 census so that the local officials would have more time to prepare. Two series of local review training workshops for local officials were conducted by the Census Bureau prior to the census. In the summer of 1989, appropriate block-numbered maps and a technical guide were mailed to the local governments.

For the 1990 census, the local review program included two phases of review (one precensus and one postcensus) for jurisdictions in mailout/ mailback areas, instead of just the postcensus review as in 1980. All other areas were limited to a postcensus local review.

All governments, whether or not they were to be participants in the precensus local review, received maps in the spring through the fall of 1989—maps showing the 1990 census block numbers so that they could begin preparing documentation of their data on a block-by-block basis. In October 1989, the 25,000 local and American Indian tribal governments that agreed to participate in the precensus local review received the precensus housing unit and special place counts by block. (The Census Bureau is forbidden by law from turning over address lists or any other individual information to anyone outside the Census Bureau.) For the 1980 census, the local review counts were made available only after the census, and by enumeration district—an area that usually contained many blocks, which made it difficult to pinpoint potential errors. In addition to traditional residential units, the counts included the total number of “special places,” such as jails, universities, and long-term health care facilities.

The local governments were instructed to compare the Census Bureau’s counts with local estimates at the block level. If the local officials found discrepancies and provided suitable documentation, census workers conducted an office review and/ or a field check of the blocks involved. The Census Bureau revised its address file and, for the postcensus operation, enumerated the missed housing units as necessary.

Throughout the local review program, the State Data Center (SDC) organizations served as important points of contact between local governments and the Census Bureau. (The SDC program is described in ch. 7.) These centers handled inquiries, responded to technical questions, and offered general assistance to local governments preparing estimates for local review.



*A census enumerator visits a housing unit to collect a questionnaire during the list/ enumerate operation*

## COLLECTING THE DATA

The field operations for collecting 1990 census data were similar to those used in 1980. The mailout/ mailback procedure was used again for most of the country’s housing units. The traditional door-to-door method (now called “list/ enumerate”) was used for about 5 percent of the housing units. In addition, a new procedure called “update/ leave” was introduced, following successful precensus tests. This section describes the preparation of address lists, 1990 collection procedures, methods used to increase mail returns, pre- and postcensus local review and special enumerations.

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### Size and Scope of the 1990 Census

- Cost \$2.5 billion for the 10-year program, over \$1 billion in 1990 alone
  - Recruited and tested 1.6 million people
  - Hired about 551,000 people; about 300,000 working at census peak
  - Opened 502 field offices, 13 regional census centers, 7 processing offices
  - Printed 274 million questionnaires
  - Linked all census offices with a system of about 530 minicomputers and dismantled it 1 year later
  - Received about 63 million mail returns within 3 weeks of Census Day
  - Counted nearly 250 million people and over 102 million housing units in the United States
-

## Procedures for Address List Preparation

To date, no single source of residential addresses has been sufficient to meet the needs of complete census enumeration. An address list also becomes outdated quickly. In preparing for the 1990 census, the following approaches were used to develop address lists and keep them up-to-date.

- **Address Acquisition**—A variety of procedures were employed to obtain the addresses used in the mailout/mailback and the update/leave distribution of census questionnaires.

*Tape Address Register (TAR)*—The TAR (a computerized, geographically coded address list) was prepared for large urban and suburban areas with city delivery postal service and for which the Census Bureau had available files that related address ranges to census geographic codes. For these areas, the Census Bureau purchased computerized commercial mailing lists of about 56 million residential addresses from vendors in 1988. Each address was assigned census geographic codes, such as district office, address register area, and block number, by computer or, if necessary, clerically.

*1988 Prelist*—This method was used to build the mailing address file mainly in small cities, suburban areas, and rural areas where address information was not sufficient for automatic geocoding or a coding file did not exist, but each mailing address uniquely identified a specific housing unit. The Census Bureau hired 35,000 temporary employees in 1988 to go door to door, compiling lists of about 27 million addresses of housing units and special places. In developing the list, census enumerators entered in an address register the mailing address of each housing unit and special place, the number of the census block in which it was located, and related information. They also marked its location on a census map. Enumerators simultaneously updated the maps with new streets and their names and corrected the existing street information.

*1989 Prelist*—Another prelist was conducted in mid-1989 in closely settled rural areas and selected seasonal housing areas. Most addresses in these areas were identified only by a rural route number or a post office box number rather than the house-number-and-street-name address that identifies a specific housing unit. Enumerators visited housing units and special places in these areas, listed their addresses, and recorded location and related information for them. Maps also were updated and corrected. They compiled addresses for about 10 million housing units.

- **Advance Post Office Check (APOC)**—The address lists purchased from vendors and the addresses collected in the 1988 prelist operation were compiled and edited by computer to identify and omit from a print file

the unusable addresses from the “address control file,” the computerized record of all addresses. A print file of deliverable addresses was sent to a contractor who printed the addresses on 3" x 8" cards and sent them to the appropriate U.S. Postal Service (USPS) facilities.

During the APOC, the USPS reviewed the address cards and identified addresses that were deliverable, undeliverable, and duplicates of other address cards. It also corrected the mailing addresses as appropriate and provided “add cards” with addresses for housing units and special places for which there were no cards. The USPS returned all the address cards and add cards to the processing centers for check-in and address file updating.

The APOC was divided into three waves. The APOC 1 was a check on the TAR addresses and was conducted in the fall of 1988. The APOC for the 1988 prelist areas consisted of APOC 2 in February and March 1989 and APOC 3 from March to May 1989. There was no APOC for 1989 prelist areas because the USPS was not involved in questionnaire delivery; enumerators checked the addresses when they delivered the questionnaires.

- **Precanvass**—This operation took place in TAR areas in May and June 1989. Enumerators verified the accuracy and completeness of the address list that had previously been updated during the APOC. Enumerators were given address registers that separately listed each known residential address, including special places and apartment designations in multiunit buildings. (By contrast, for the 1980 census, enumerators were given an address register that contained listings of only basic street addresses; i.e., house or building number and street name, but no apartment designations. The listing showed the number of units at an address, and if different from what actually existed, the enumerator listed all the apartment designations.) The enumerators were instructed to verify the accuracy and completeness of the addresses of all housing units and special places, including apartments in multiunit buildings they identified.



*Keyers update the address control file in one of the processing offices.*

Enumerators visited every third address in blocks consisting primarily of single-unit structures. In addition to verifying the address information, they inquired about additional living quarters at the contacted and neighboring units. Enumerators made contact at every address that appeared to be a multiunit building, but did not personally visit each unit; they needed only to contact a knowledgeable respondent at the structure to confirm apartment designations.

The corrected address registers were sent to the processing office for keying to update the address control file.

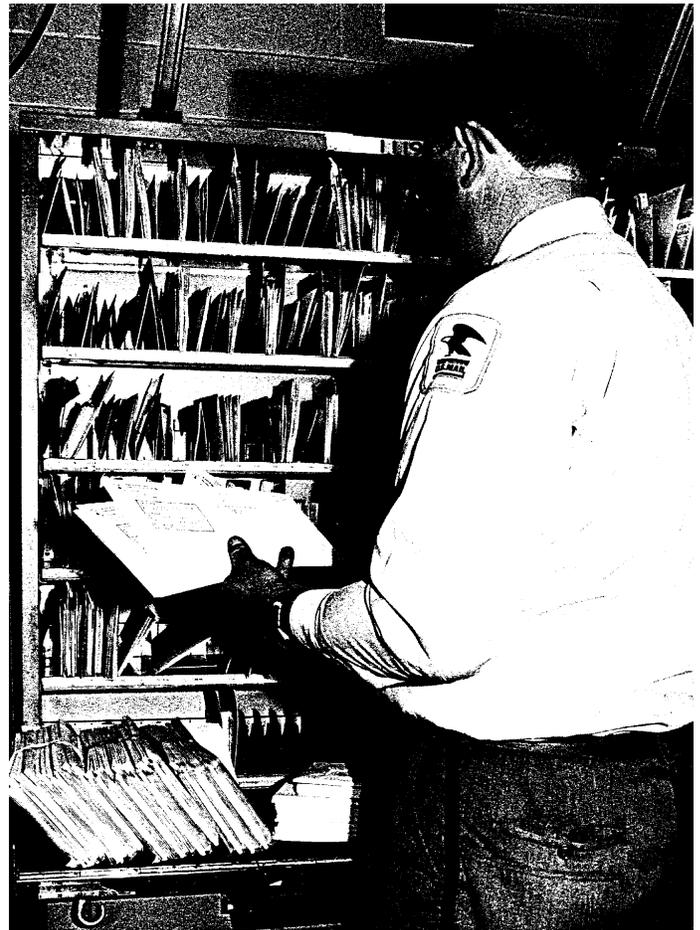
- **APOC Reconciliation**—In this operation, enumerators, through on-site visits, reconciled addresses from the 1988 prelist that the USPS reported as added, duplicated, or undeliverable. If an address was added by the USPS, it was visited by an enumerator, verified, and given a geographic code. The enumerator also added the address and related information to an address register and marked its location on a census map. Special procedures were applied to resolve addresses reported as duplicates and undeliverables.
- **Precensus Local Review**—This process occurred after precanvass, from November 1989 to February 1990. Local officials, as part of the Local Review Program, alerted the Census Bureau to blocks where the precensus housing and/ or special place counts (based on the number of addresses) appeared to be inaccurate. (See discussion below of the Local Review Program.)
- **Special Place Prelist**—Special places are residences other than the usual house or apartment where people live or stay. They include colleges and universities, boarding and rooming houses, hotels and motels, marinas, hospitals, nursing homes, prisons, and military installations. In January 1990, each known special place received a letter notifying the contact person of the upcoming visit by an enumerator. The enumerator verified the existence and address of each special place and listed any individual group quarters and housing units associated with it. For example, dormitories on a college campus were classified as group quarters, but a separate house provided for the president of the college was classified as a housing unit. All revised addresses were keyed by the Baltimore Processing Office into a computer file that later generated lists of group quarters for the enumeration process.
- **Casing Check**—In this operation, the USPS checked the addresses for the mailout/ mailback areas once again before delivering the census forms in March 1990. The casing operation was a sorting process carriers used to put mail in the proper sequence for delivery. Each housing unit receiving mail has a designated slot at the carrier's work station. The carriers placed or "cased" address cards in the appropriate slot. This enabled undeliverable, duplicate, and missing addresses to be identified.

Figure 3-1. Key Activities and Dates in Preparing a Comprehensive Address List

TAR creation .....	First half of 1988 through March 1989
1988 Prelist.....	July 1988 to January 1989
1989 Prelist.....	June 1989 to September 1989
APOC .....	In three phases, from Sept. 1988 through May 1989
Precanvass .....	May and June 1989
APOC Reconciliation.....	June to August 1989
Precensus	
Local Review .....	November 1989 to February 1990
Casing check .....	March 1990
Mailout .....	March 1990

**General Collection Activities**

**Principal Collection Methods**—Questionnaires were delivered to all housing units in March 1990, with the exception of the remote or outlying areas of Alaska where enumeration began in mid-February 1990. Households were instructed



*A postal worker sorts questionnaires into the appropriate slots prior to delivery.*

to complete the questionnaires as of April 1 and return them by mail or, in some areas, hold them for enumerators to pick up. The Census Bureau used three basic data collection methods to take the census:

- *Mailout/ Mailback*—The Census Bureau again used self-enumeration as the primary means of census-taking. To accomplish this, a mailout/ mailback (MO/ MB) system was used to distribute and return the questionnaires for most of the Nation’s population. Cities, towns, suburban areas, and rural areas where good mailing addresses existed comprise the mailout/ mailback areas (TAR and 1988 prelist areas). The USPS delivered the questionnaires to housing units in late March, and residents were asked to return them by mail. About 84 million housing units (84 percent) were in mailout/ mailback areas.
- *Update/ Leave*—For 10 million housing units (10 percent), mainly in the South, Midwest, and in large urban public housing projects, the Census Bureau used the update/ leave method of questionnaire distribution. Shortly before Census Day, April 1, census enumerators recanvassed the areas that had been prelisted in 1989, updating the existing address list and map and leaving a questionnaire at each residence. The residents were asked to mail the questionnaires to the Census Bureau.
- *List/ Enumerate*—A third type of questionnaire distribution method was list/ enumerate (formerly called conventional or door-to-door enumeration). This method was used in very remote and sparsely populated areas, selected seasonal housing areas, many American Indian reservations, and the remote areas and smaller cities of Alaska. In these areas (except remote Alaska), the post office delivered unaddressed mailing pieces (advance census forms having only 100-percent questions).

Beginning on March 26, 1990, enumerators canvassed specific assignment areas, listed the address and related information for each housing unit, and marked its location on a map. They also updated and corrected the maps. As they canvassed their assigned areas, the enumerators visited each housing unit and picked up the completed census questionnaire. If residents had not already filled it in or if the housing unit was vacant, the enumerators conducted interviews to complete questionnaires for the housing units. In addition, the enumerators obtained long-form information from a sample of the units. About 6.5 million (6 percent) of the Nation’s housing units, mainly in Alaska and the western and northern parts of the United States, were enumerated this way.

- *Nonresponse Followup*—By April 23, 1990, approximately 65 percent of the questionnaires had been mailed back. To complete the collection effort and verify the status of housing units visited during earlier census operations, nonresponse followup was conducted at the end of April and lasted about 8 weeks. Enumerators began visiting each housing unit in the mailout/

mailback and update/ leave areas for which the Census Bureau had not checked in a questionnaire. As of July 30, 1990, 34,278,233 housing units had been visited.

### Special Counts

Standard census procedures were not appropriate for counting persons in unique living arrangements, such as college students in dormitories, inmates of institutions, and persons in shelters or on the streets. Instead, the Census Bureau designed specialized procedures for these types of situations.

### Selected Components of the Homeless Population—

The program to count these groups was expanded for the 1990 census compared with efforts to reach the transient population for the 1980 census. The Census Bureau counted selected components of the homeless population during “Shelter and Street Night” which was conducted in two separate operations at pre-identified shelters and at street locations where people were known to congregate.

Before the shelter enumeration, the Census Bureau sent a letter to each local chief executive/ highest elected official throughout the country requesting pre-identification of all shelters, hotels and motels charging less than \$12 per night, and other locations including street locations where persons were known to stay. Census employees also worked directly with local officials, persons who worked with the visible street and shelter populations, and the groups themselves to identify the shelter and street locations to be visited during the operation.

Shelter enumeration was conducted nationwide 2 weeks prior to the census, from 6:00 p.m. to midnight on

Figure 3–2. **Collection Activities**

Local census offices opened.....	March 1989-January 1990
Update/ leave .....	March-April 1990
Postal delivery of questionnaires .....	March 1990
List/ enumerate .....	March-May 1990
Nonresponse followup .....	April-July 1990
Field followup.....	July-August 1990
“Were You Counted?” campaign .....	June-September 1990
Data capture .....	March-December 1990
Mailout of postcensus local review count.....	August-September 1990
Postcensus local review recanvass.....	September-October 1990
Local census offices closed.....	August-November 1990

March 20, 1990. (In a few areas, the Census Bureau had to continue the effort the next night to complete the job.) The Census Bureau counted persons who were found in pre-identified hotels, motels, family shelters, and other emergency shelters.

Individual Census Reports (ICR's) were used to enumerate shelter populations. Both the long- and short-form ICR's were similar to the regular questionnaires, except they did not ask any questions about housing and were answered by only one person. Only a small number of shelter operators refused to cooperate. In those cases, enumerators stood outside and counted people as they left in the morning.

Street enumeration occurred from 2:00 a.m. to 4:00 a.m. on March 21. All visible persons at pre-identified locations were counted, except persons in uniform or persons engaged in obvious money-making activities other than begging or panhandling. The locations included such places as parks, bus terminals, and streets where persons were known to congregate.

From 4:00 a.m. to 8:00 a.m., enumerators were stationed at abandoned and boarded-up buildings. They waited outside the buildings until someone came out. They attempted to get the number and characteristics of anyone who might be living inside the building from the first person who came out of the building. If unsuccessful, the enumerators waited for another person.

Only short forms were used in street enumeration. In some instances, enumerators were able to fill in by observation only the person's age, race, and sex. Persons counted in this operation were considered residents of the jurisdiction in which they were actually located. The Census Bureau also attempted to count the number of adults with children residing in S-Night locations. Approximately 11,000 shelters and 24,000 street sites were visited. The safety of the enumerator and the respondent was balanced with the mission of counting people. For example, enumerators did not enter abandoned buildings, climb onto rooftops, or check trash dumpsters.

Other potential components of a count of persons without homes were covered during the regular census operations. These included persons or entire families who were doubled up in housing units with friends or relatives, shelters for abused women, persons with no usual home living in tents at commercial campgrounds, and institutions, such as local jails, that might have offered temporary shelter. In such situations, enumerators would have had difficulty determining who had a usual home, and consequently, such people could not be classified with certainty as not having a home. Persons or entire families who were doubled up in housing units with friends or relatives were considered "homeless" by some and "precariously housed" by others, but were not accounted for separately by the Census Bureau.

Data will be tabulated on the number and characteristics of the population in each of the settings in which the visible street and shelter populations lived. Data, therefore, will be

available for persons and families living in shelters and low-cost hotels and motels, in nonsheltered locations, in shelters for abused women, and so forth.

There will be no separate tabulations that combine these population groups; users can add the components they think are appropriate to arrive at their own totals. Statistics on one or more of these components can be found in all four of the 1990 census *Summary Tape Files* and in *General Population Characteristics* (series 1990 CP-1) and *Social and Economic Characteristics* (series 1990 CP-2). (See ch. 5, "Data Products," for more information on these products.)

The Census Bureau conducted a substantial research program to assess the adequacy of S-Night procedures. It involved evaluating the completeness of lists of shelters, observing and debriefing enumerators at work at street locations, and, after S-Night, interviewing visible street and shelter populations regarding their awareness of and participation in the census. Research results are being published.

**General Group Quarters**—To enumerate most group quarters, enumerators visited each facility identified during special place prelist. They obtained a list of persons' names and rooms, and distributed Individual Census Reports (ICR's) to all residents. A sample of the residents received long-form ICR's. The enumerators returned within a few days to collect the forms and to follow up with persons who did not respond. When followup was not possible, usually in prisons or long-term care facilities, as much information as possible was obtained from records or staff members.

**Military Personnel**—To count the Nation's military personnel, their dependents, and civilians living on military installations, the Census Bureau teamed up with the Department of Defense, its branches, and the Coast Guard. The crews of military vessels were counted as well as land-based military personnel.

In order to collect population data from land-based military personnel, each base was divided into manageable units for enumeration purposes. A project officer at each installation was responsible for distributing Military Census Reports (MCR's) to and collecting them from all military personnel regardless of whether they lived in barracks or in on-base or off-base housing units. For each military unit at an installation, there was a unit representative who was in charge of making sure that everyone in the unit completed a report. Unit representatives reported to the project officer.

Military personnel living in group quarters, such as barracks, were counted as residents there. Those living in housing on or off base received a regular census questionnaire in the mail or by a visit from an enumerator and were to be included on that questionnaire (unless they were away from home for an extended period), as well as on the MCR. Later, the Military Census Reports completed at the base by persons who provided addresses for housing units were used as a check to ensure that they

had been included on the questionnaire from their housing unit. Those who were not included were added by the Census Bureau using the information from the Military Census Reports, which then were destroyed.

Crews of military and Coast Guard vessels were asked to complete Shipboard Census Reports. These forms were mailed directly to the commanding officers of all ships. A project officer from among the crew was assigned to distribute and collect the reports. If the person's usual residence was the ship, the Census Bureau counted the person at the homeport location. If the homeport included more than one jurisdiction and the ship was at homeport on Census Day, the crew was counted at the jurisdiction where the ship was actually docked. Crew members could elect to report a usual residence ashore. The Census Bureau matched the person to the appropriate household on shore to avoid duplication and to ensure inclusion on the onshore questionnaire. Crews of vessels deployed to the U.S. Navy's 6th and 7th Fleets on Census Day were counted as part of the overseas population.

As a result of bipartisan congressional support and for only the second time in U.S. census history (the first being for the 1970 census), overseas members of the Armed Forces, Federal civilian employees, and their dependents living with them were included in the 1990 census State counts used for congressional reapportionment. Stateside residence for those groups living overseas generally was determined by the employee's "home of record."

**Crews of Merchant Vessels**—Lists of U.S. flag merchant vessels were obtained from the Maritime Administration, and Shipboard Census Reports were mailed to their crews through each ship's owner or operator. The crews had the option of claiming a usual residence other than the assigned vessel and then were treated the same as military crews; that is, they were counted at their off-ship residence. Those who did not were counted as residents of the ship and were attributed as follows:

1. The port where the ship was docked on Census Day, if that port was in the United States or its territories.
2. The port of departure if the ship was at sea, provided that the port was in the United States or its territories.
3. The port of destination in the United States or its territories, if the port of departure of a ship at sea was a foreign port.
4. The overseas population if the ship was docked at a foreign port or at sea between foreign ports. (These persons were not included in the overseas population for apportionment purposes.)

**Persons Living Abroad**—Counts of civilians working for the Federal Government, military personnel, and their dependents living abroad generally were obtained from U.S. Government administrative records and a survey of Department of Defense civilians and were included in the apportionment population. U.S. citizens abroad temporarily

on Census Day (on private business, travel, and so forth) were enumerated at their households upon their return, if not included on the return by a resident; they either filled out their own questionnaire or were visited by enumerators during nonresponse followup.

**Students**—College students were counted at the place where they lived while attending school. Students below the college level and living away from home were counted at their parents' homes.

### Count Improvement Efforts

**Field Followup**—Housing units identified as "vacant" or "delete" during regular enumeration activities and residual nonresponse cases were revisited beginning in late June to verify their status. Also visited were failed-edit cases that could not be resolved by phone. Approximately 14,946,513 housing units were revisited during the field followup operation.

**"Were You Counted?" Campaign**—During the summer of 1990, persons who believed they were not included in the census were given an opportunity to be counted. They could call a toll-free number to provide basic household information, or they could obtain a "Were You Counted?" form from a wide range of sources, including their local newspapers. The responses were checked against the census records to eliminate duplications.

**Parolee/ Probationer Coverage Improvement Program**—This program was designed to provide State governments the opportunity to work with the Census Bureau in ensuring the enumeration of the estimated 2.6 million persons involved in parole and probation programs nationwide. With the exception of Maine, all States and the District of Columbia elected to participate in the program.

There were two phases to the program. The first phase consisted of providing State liaisons (designated by the head of each State's correctional department) with forms to be distributed to the parolees/probationers under their jurisdictions. The State liaisons were to collect the completed forms and mail them to the appropriate processing office. Due to the low response rate resulting from this operation, a second phase was initiated. In this phase Census Bureau enumerators completed forms for parolees/probationers using information obtained from State and local records.

Information obtained about the parolees/probationers included their names, addresses as of April 1, 1990, and basic demographic characteristics. The processing offices then conducted a search/match operation to see if any parolee/probationer had been listed on a census questionnaire obtained through regular enumeration activities. Only those persons with geocodable address information and not listed on a matched address questionnaire were added to the count.

**Postcensus Local Review**—In the postcensus phase of the local review program, all 39,000 local and tribal governments were sent new sets of maps from May to July of

1990. The postcensus maps included the local governments' official boundaries as of January 1, 1990, based on the response to the Census Bureau's 1990 Boundary and Annexation Survey. Housing unit counts and group quarters population totals from the actual census for a second block-by-block check were sent in late August. Following this second local review, the Census Bureau received acceptable challenges from approximately 7,000 governmental units. Enumerators again conducted office checks and/or recanvassed selected blocks to check well-documented differences. The Census Bureau corrected its records accordingly.

**Recanvass**—This operation was designed to improve coverage in areas where count review and other research indicated evidence of deficient housing unit counts. The Census Bureau looked at its data on areas of new construction for possible missed new subdivisions, reviewed the "Were You Counted?" forms, and checked local media reports or local complaints of missed buildings or blocks. The target blocks were recanvassed, missing addresses were listed, and interviews were obtained from August through October 1991.

## PROCESSING THE DATA

### An Overview

Census questionnaires that were returned by mail went directly to 1 of over 450 local district offices or to 1 of 7 processing offices. Processing of the questionnaires occurred on a flow basis in both the district offices and the processing centers, unlike 1980, when processing did not begin until all questionnaires for a particular area had been received. This approach helped speed up production of the data products.

At the processing offices, questionnaires were scanned by high-speed laser sorters. In the district offices, bar code wands were used to read the questionnaire identification code. This binary-coded decimal (BCD) code reduced the amount of clerical assistance needed during the check-in procedure. With the exception of the scanning procedures, the check-in and editing operations were the same in both the processing offices and the district offices.

Lists of addresses from which questionnaires had not been returned were generated and were contacted again by enumerators in the appropriate district office.

Each questionnaire was examined for completeness and internal consistency. Computer and clerical editing programs also helped uncover inaccuracies. Selected questionnaires with problems were followed up. For example, a household that failed to report the ages of any of its members was contacted by an enumerator, usually by telephone. After completion, the questionnaires were transmitted back to the appropriate processing office.

Processing centers were located in Albany, NY; Austin, TX; Baltimore, MD; Jacksonville, FL; Kansas City, MO; San Diego, CA; and the permanent Census Bureau processing facility in Jeffersonville, IN. For the 1980 census, there were three processing centers.



*A bar code scanner is used to check in a questionnaire at a district office.*

Census personnel at these sites were responsible for the following data-capture activities:

1. Receiving, sorting, and storing questionnaires.
2. Microfilming all questionnaires.
3. Computer editing the questionnaires returned directly to a processing center to check for completeness and consistency.
4. Transmitting the information to Census Bureau headquarters, or back to the district office if additional followup was required.
5. Clerically reviewing the computer-edited data to determine whether responses met required standards in initial computer processing.

The principal data processing operations performed at Census Bureau headquarters were:

1. Computer editing and related operations needed to prepare the files with the records for all households and individuals (basic record tapes).
2. Tabulation of information from the basic record tapes.
3. Review of the resulting statistics by professional staff.
4. Preparation of data products, such as reports and public-use computer tapes.

These and other processing activities are described in greater detail below.

The processing of the census data occurred in two separate but overlapping phases. The first phase involved the 100-percent questions on the short forms and those same questions found on the long forms. The second phase involved the long-form questionnaires. A facsimile of the long form is included at the end of chapter 2.

Preparation of the 100-percent data was given priority because the Census Bureau was required by law to provide the President with the final, official State population counts for the reapportionment of the House of Representatives by December 31, 1990. In addition, the Census Bureau was also required to provide each State with geographically detailed population counts for redistricting purposes by April 1, 1991. In addition, the 100-percent data are used in establishing weighting controls for inflating sample responses to reflect the total population.

Within each processing phase, the preparation of statistics generally occurred on a flow basis by State. As the data for the geographic levels within a State were tabulated, they were reviewed by computer and by the Census Bureau staff to ensure that the confidentiality of individual information had not been violated and that the data had been accurately tabulated. Following this review, data products could be prepared and issued.

### Details of Census Processing

The 1990 census processing procedures changed considerably from those used for the 1980 census. The principal changes involved the use of improved control procedures and more advanced automation equipment.

Two objectives in planning for the 1990 census were to automate many of the time-consuming and labor-intensive clerical tasks and to begin converting data on the questionnaires into machine-readable format several months earlier than for the 1980 census. Traditionally, census data collection and much of the data processing had been paper- and people-intensive tasks. The use of automated equipment greatly helped with the mountains of paper and the thousands of clerical tasks and made it possible to achieve greater accuracy and control.

**Address Control File (ACF)**—The ACF is a computerized file of the census address list. With this automated control file, the Census Bureau could more easily determine if specific addresses were included in the file, update the file with addresses missed in earlier operations, and improve collection and processing management control. For the 1980 census, the changes were penciled onto paper copies of the address list.

In addition to reducing errors in the address list by eliminating many of the clerical activities, the address control file gave more control over the entire census process and allowed census personnel to better evaluate coverage improvement operations. Also, with an automated address list, the Census Bureau was able to take advantage of bar code technology for automated check-in.

**Concurrent Processing**—For the 1980 census, the processing of questionnaires for a district office did not begin until all the collection work of the district office had been completed. For the 1990 census, automation advances made it possible to process questionnaires on a flow basis



*A questionnaire is photographed onto microfilm, which will be scanned by FOSDIC.*

and, thus, to begin the conversion of questionnaire data into machine-readable form concurrently with data collection. This approach also allowed for earlier review of data and more time for detection and correction of problems in the data.

Concurrent processing helped meet the Census Bureau's legal mandates for delivering apportionment counts to the President by December 31, 1990, and for delivering redistricting counts to the States by April 1, 1991. It helped meet the goal of disseminating other data products in a more timely fashion.

**FOSDIC**—A key item of equipment in the processing activities was FOSDIC (Film Optical Sensing Device for Input to Computers), which has been improved for use in each census since its introduction in 1960.

The questionnaires were specially designed for FOSDIC processing. The short forms, together with the 100-percent portion of the long-form or sample questionnaires, were microfilmed for FOSDIC processing with a minimum of handling. A microfilming camera photographs each page of a questionnaire. A FOSDIC reader takes the developed microfilm and scans the darkened circles, and transmits the data to computers at Census Bureau Headquarters.

For 1990, FOSDIC machines were redesigned to enhance pattern recognition and answer analysis. For example, FOSDIC compensated for smudges or erased marks on the questionnaire. Each filled-in circle on a census questionnaire was read in 7 millionths of a second. This allowed FOSDIC to scan 960 questionnaire pages per minute. Written responses, such as respondents' names, could not be "read" by FOSDIC and were not recorded on the magnetic tape. Each processing office was equipped with 3 FOSDIC scanners, for a total of 21.

For a number of the sample questions, such as those on income, occupation, place of work, and ancestry, highly detailed data classifications were needed. So, instead of

listing a limited number of possible responses, the questionnaire asked that the exact answer be written in, which meant they had to be captured by some method other than FOSDIC. A maximum of approximately 25 written responses for an individual and 7 for a housing unit could be involved.

For 1990, there was very little clerical coding of written responses. Handwritten answers to write-ins on questionnaires were keyed into the computer. Then specially designed software assigned the appropriate machine-readable codes to those responses which required coding, such as place of work, place of residence 5 years ago, and occupation.

Once the data were in machine-readable form, the computer put the records for each person and housing unit through various editing and weighting processes.

**Computer Editing**—This process included a check to make sure that the information recorded for a questionnaire was complete and consistent. Each response or record was reviewed and, if necessary, edited to eliminate inconsistent information. For example, if the householder was a married male and the current marital status of the female reported as wife of the householder was “divorced,” then the records were inconsistent. In this case, marital status on the wife’s record was changed to married.

When missing or inconsistent information could not be supplied or corrected from within the record, an allocation procedure was called into the processing stream. For example, if the record for the year a person moved into a house was given as “1980 to 1984” and the year the house was built was given as “1985 to 1988”, there was no way the answer could be supplied from other information on the record. However, the computer stores a set number of previously processed records which were classified by various housing characteristics. Where missing or inconsistent information was encountered in a record, the computer searched for a housing unit which was the same for other selected characteristics. Then the information for the particular item from the stored record was inserted into the record with missing or inconsistent information.

A similar procedure was used for population characteristics. For example, the computer stored wage or salary income entries classified by age, sex, race, ethnicity, relationship to householder, educational attainment, major occupation group, class of worker, and number of weeks and usual hours worked in 1989, for persons 16 years old or over who worked in 1989. When it encountered a record from which the wage and salary income was missing, it matched that record to one with the same values on the categories listed above. The income from the stored record was then assigned to the record being processed.

Substitution, which was another form of imputation, sometimes was used. For example, a substitution occurred when a person or household was known to be present but for which there was no information. In this case, data from a previously processed household were selected as a substitute, and the full set of characteristics for each person was duplicated. The necessity for a substitution

could arise from either a “noninterview” or a mechanical failure. (Additional information on allocation and substitution, and guidance on where to find statistics on the numbers of allocations and substitutions are found in ch. 6.)

These imputation procedures made the statistics produced from census records more accurate in their description of the population and housing and more useful than if “not reported” categories were added to each tabulation.

Following edit and imputation, the sample data went through a sample weighting procedure. This procedure determines weights (multipliers) which, when applied to the sample data for any given small area, produced figures which matched or were very close to the 100-percent figures for total population, race, sex, age, family size, and certain housing characteristics. (See the section on sample weighting in ch. 6.)

Once the above processes were completed, edited data about individuals and housing units, together with associated geographic information, were stored on computer tapes known as basic record tapes (BRT’s). All 100-percent and sample tabulations are made from these tapes. Although the BRT’s do not contain names or addresses, they have information about individuals and detailed geographic codes. The BRT’s are confidential and may be used only by Census Bureau employees in preparing statistical products.

Data summaries are prepared on computer tapes from the BRT’s for many geographic areas, such as blocks, census tracts, places, and counties. They are the source for the tabulations that appear in the various summary data products.

The BRT’s also are used to prepare public-use microdata samples, and both BRT’s and summary tapes may be used to prepare special tabulations. The microdata samples are standard Census Bureau products; the special tabulations are prepared at user request and expense. Some specialized data needs can be met by the User-Defined Area Program for a lower cost than a special tabulation. (See ch. 5 for more information on data products.)

Census data are refined through many processes, but no tabulations are released without a final check. All data products, whether standard or custom, pass through a variety of analyses to ensure that the statistics are tabulated properly and that no confidential information is revealed.

## SUMMARY

Aiming to increase coverage of the population, the Census Bureau planned comprehensive procedures to enlist public support for the 1990 census. Encouraging a high response rate among all racial and ethnic groups was a primary objective. The Census Bureau used many approaches, including minority census advisory committees, community service specialists, and massive public service advertising.

Data collection procedures also were improved by earlier and more extensive efforts to reach people living on the street and in emergency shelters. The expansion of the local review program helped to improve the coverage and accuracy of the data collected by allowing local governments to review counts of housing unit and special places or the group quarters population counts before they became final.

Processing procedures were improved through better control, the use of the bar code along with more advanced automation equipment, and additional processing sites.

The success of the census depends not only on the proper procedures and equipment, but also on accurate geography. Chapter 4 identifies the entities for which 1990 census data were collected, explains how boundaries are established, describes the different types of census maps, and discusses the TIGER System and related products.

# CHAPTER 4. Geography

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## INTRODUCTION

Geographic considerations are important to all users of 1990 census data. This chapter describes the principal legal/ administrative and statistical entities for which the Census Bureau provides data and examines some of the hierarchical relationships among them. For users interested in comparing 1990 census data for particular entities with the data from past censuses, the chapter describes how boundaries are determined and the changes that occur.

Also discussed are the different types of maps the Census Bureau provides for use in conjunction with the 1990 census data. For the first time, a computer-readable geographic data base was created to automate the map production and related geographic activities required to support the decennial census. Known as the TIGER (Topologically Integrated Geographic Encoding and Referencing) System, it contains an automated description of physical and boundary features throughout the United States and its territories.

In order to conduct the census, the Census Bureau must determine the boundaries of legal/ administrative and statistical entities, prepare appropriate maps, assign all addresses to their correct geographic locations, and accomplish other massive geographic operations. As a result, the Census Bureau produces many geographic products that are helpful to data users. These products, including maps, geographic code schemes, and TIGER data base extracts, are described in this chapter.

The 1990 census provides statistics for more types of geographic entities than any other data source. In addition to furnishing data for such familiar governmental units as States, counties, and cities, the Census Bureau releases data for geographic entities defined specifically for statistical purposes; for example, metropolitan areas, census tracts, and census blocks.

## 1990 CENSUS GEOGRAPHIC ENTITIES

This section defines the principal types of geographic entities for which the 1990 census provides data and highlights significant changes since the 1980 census. More detailed information about these and other geographic entities can be found in the 1990 Census Glossary and in appendix A of the 1990 census reports and technical documentation.

Most census products present predefined sets of data for standard geographic entities designed to meet the needs of the majority of data users. However, it is possible to arrange for custom tabulations through the Special Tabulations Program, which allows users to “split” the tabulated census blocks, and the User-Defined Areas Program, which provides data for user predefined geographic units that do not split census blocks. Both of these programs are described in chapter 5.

In the following discussion, the types of geographic entities are divided into two categories: Legal/ Administrative Geographic Entities and Statistical Geographic Entities.

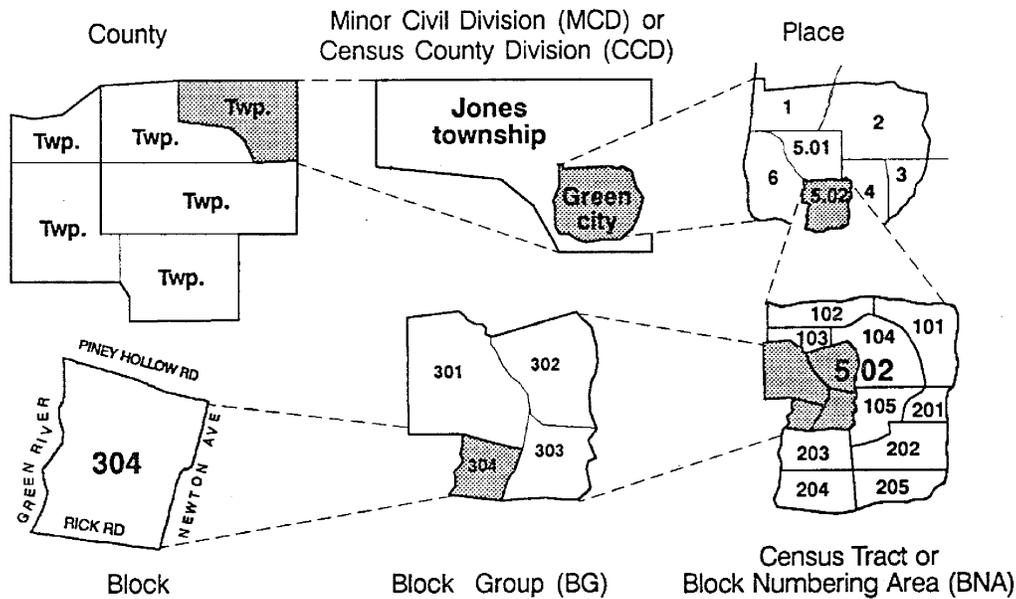
### Legal/ Administrative Geographic Entities

The following are the legally or administratively defined geographic entities for which the Census Bureau reports data from the 1990 census:

**United States, States, the District of Columbia, Puerto Rico, the Virgin Islands of the United States, and the Pacific Outlying Areas**—The outlying areas are American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the Republic of Palau. The 1980 census included the Trust Territory of the Pacific Islands, of which Palau and the Northern Mariana Islands were a part.

**Counties**—Data also are reported for the statistical equivalents of counties, including parishes in Louisiana; boroughs and census areas in Alaska; independent cities in Maryland, Missouri, Nevada, and Virginia; that part of Yellowstone National Park in Montana; municipios in Puerto Rico; the individual islands in the Virgin Islands of the United States; and a variety of entities in the outlying areas. The District of Columbia and Guam do not have corresponding governmental units; therefore, these entities also serve as the statistical equivalents of counties. The 1990 census included 3,248 counties and statistically equivalent areas compared with 3,231 for the 1980 census.

Figure 4-1. Decennial Census Small-Area Geography



**County Subdivisions**—The 30,386 minor civil divisions (MCD's) are legally defined subcounty entities such as towns, townships, and districts. See figure 4-1. In 21 States, some or all incorporated places are not part of any MCD, and they are treated as the statistical equivalents of MCD's as well as being included in the data tabulations as places. For the 1990 census, MCD's occur in 28 States (compared to 29 in 1980), Puerto Rico, and the outlying areas. MCD's in several States had changes that affected their numbers, names, and boundaries. In addition, the census provides data for subdivisions of MCD's (sub-MCD's called *subbarrios*) in Puerto Rico.

**Incorporated Places**—These governmental units are incorporated under the laws of each State. In addition to presenting data for an inventory of all or selected places, the Census Bureau presents data for them or their parts as entities subordinate to county subdivisions in the summary tape files and some published reports. They are known as cities, towns (excluding the New England States, New York, and Wisconsin, where the Census Bureau treats towns as MCD's), boroughs (excluding Alaska and New York, where the Census Bureau treats boroughs as counties and MCD's, respectively), and villages. Many incorporated places had changes (incorporation, disincorporation, merger, annexation, or detachment) that affected their numbers, names, and boundaries since the 1980 census. The 1990 census included 19,365 incorporated places, compared with 19,176 in the 1980 census. The Census Bureau identifies some incorporated places as extended cities if they contain substantial territory with population density of fewer than 100 people per square mile; the low-density territory and its populations are defined as rural areas. In previous censuses, extended cities were identified only in urbanized areas (see page 62).

**Consolidated Cities**—For the 1990 census, the Census Bureau recognized six cities that have consolidated their

governmental function with a county or MCD but continue to contain governmentally active incorporated places within and as part of those cities. They are Milford, CT; Jacksonville, FL; Columbus, GA; Indianapolis, IN; Butte-Silver Bow, MT; and Nashville-Davidson, TN. The Census Bureau did not provide data for consolidated cities prior to the 1990 census. The tabulations for places show only the portion of the consolidated city not in any other place; e.g., "Jacksonville city (remainder)."

**American Indian Reservations/Trust Lands**—The Census Bureau recognized 311 Federal and State reservations for the 1990 census, including 3 jointly administered areas that the Census Bureau treats as

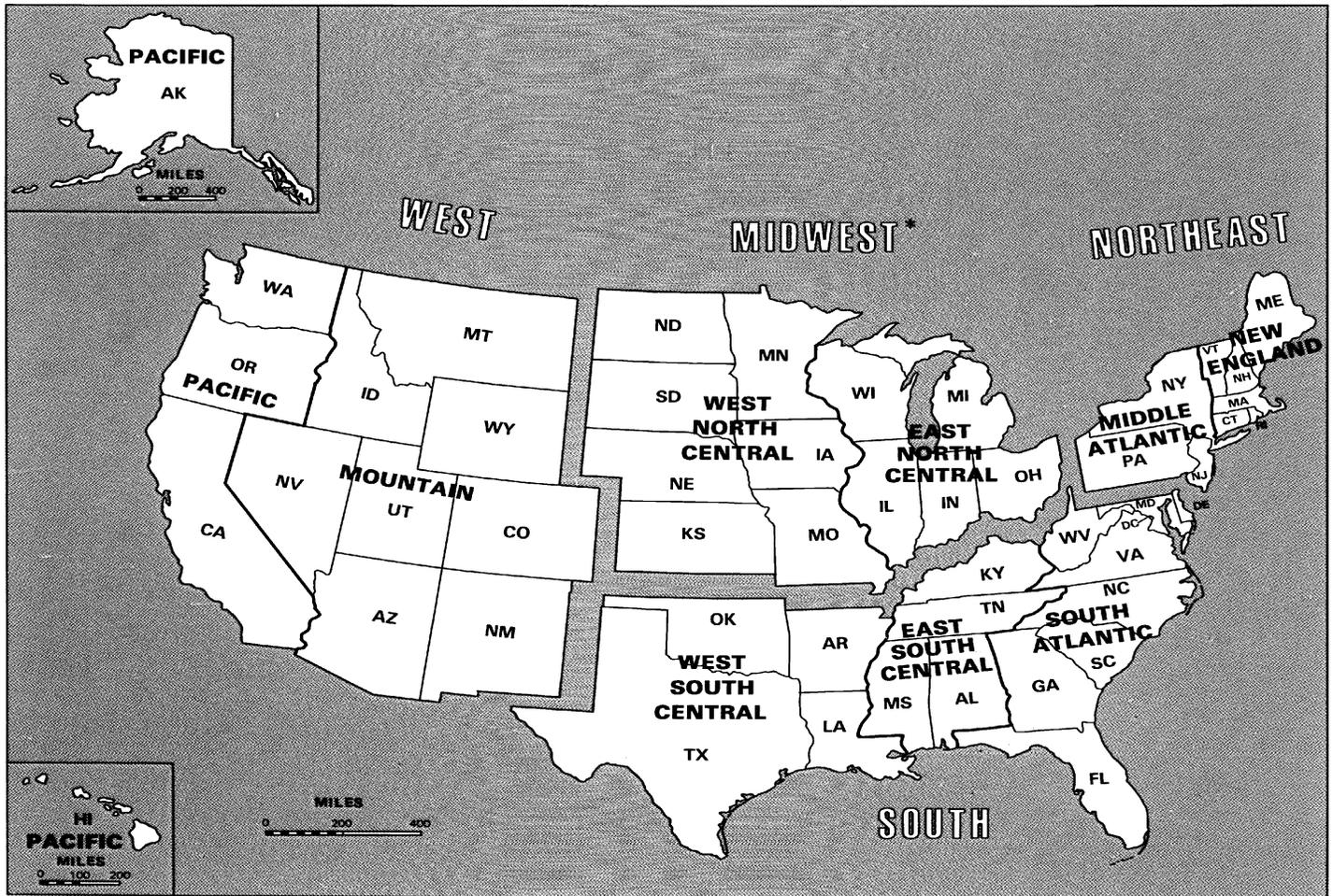
if they were reservations. Reservation boundaries are established by treaty, statute, and/or executive or court order. The reservations and their boundaries were identified by the Bureau of Indian Affairs and State governments. The boundaries of reservations may cross State, county, county subdivision, and place boundaries as well as the boundaries of statistical entities. Trust lands recognized by the Census Bureau are areas with specific boundaries outside a reservation, identified by the Bureau of Indian Affairs and held in trust for American Indians. For the 1990 census, the Bureau of Indian Affairs identified both tribal and individual trust lands; whereas, only tribal trust lands were included for the 1980 census.

**Alaska Native Regional Corporations (ANRC's)**—These 13 corporate entities were established by the Alaska Native Claims Settlement Act to carry out business and nonprofit activities by and for Alaska Natives. The census provides data for 12 ANRC's that have specific boundaries and cover the State of Alaska (except for the Annette Islands Reserve). The 13th serves Alaska Natives not resident in Alaska who do not belong to any of the other 12 corporations and is not included in the census.

**Congressional Districts (CD's)**—The number of CD's remains at 435. After each decennial census, State officials and the courts draw new CD boundaries for States with two or more Representatives, to reflect changes in a State's population.

**Voting Districts**—A total of 147,266 voting districts was identified for the 1990 census by State governments for the purpose of elections. They include election districts, precincts, legislative districts, and wards. For census purposes, each State participating in Phase 2 of the 1990 Census Redistricting Data Program received maps from

Figure 4-2. Regions and Census Divisions of the United States



U.S. Department of Commerce  
BUREAU OF THE CENSUS

\*The Midwest Region was designated as the North Central Region until June 1984.

the Census Bureau to outline the boundaries of voting districts around groups of whole census blocks. In addition, a special program permitted Puerto Rico to identify 1,606 voting districts. The entities identified as voting districts are not necessarily those legally or currently established, may have had their legal boundaries adjusted to meet Census Bureau requirements regarding visible boundaries, and were not necessarily identified for every county in a participating State or for the entirety of each county. (Four States chose not to participate in the program.) For the 1980 census, voting districts were called election precincts.

**ZIP Codes**—These are established by the U.S. Postal Service to expedite mail delivery. The Postal Service changes codes occasionally and their geographic coverage frequently to better meet mail delivery needs. The Census Bureau does not collect data by ZIP Code, but publishes limited statistics by summarizing the data for residential ZIP Codes.

**Statistical Geographic Entities**

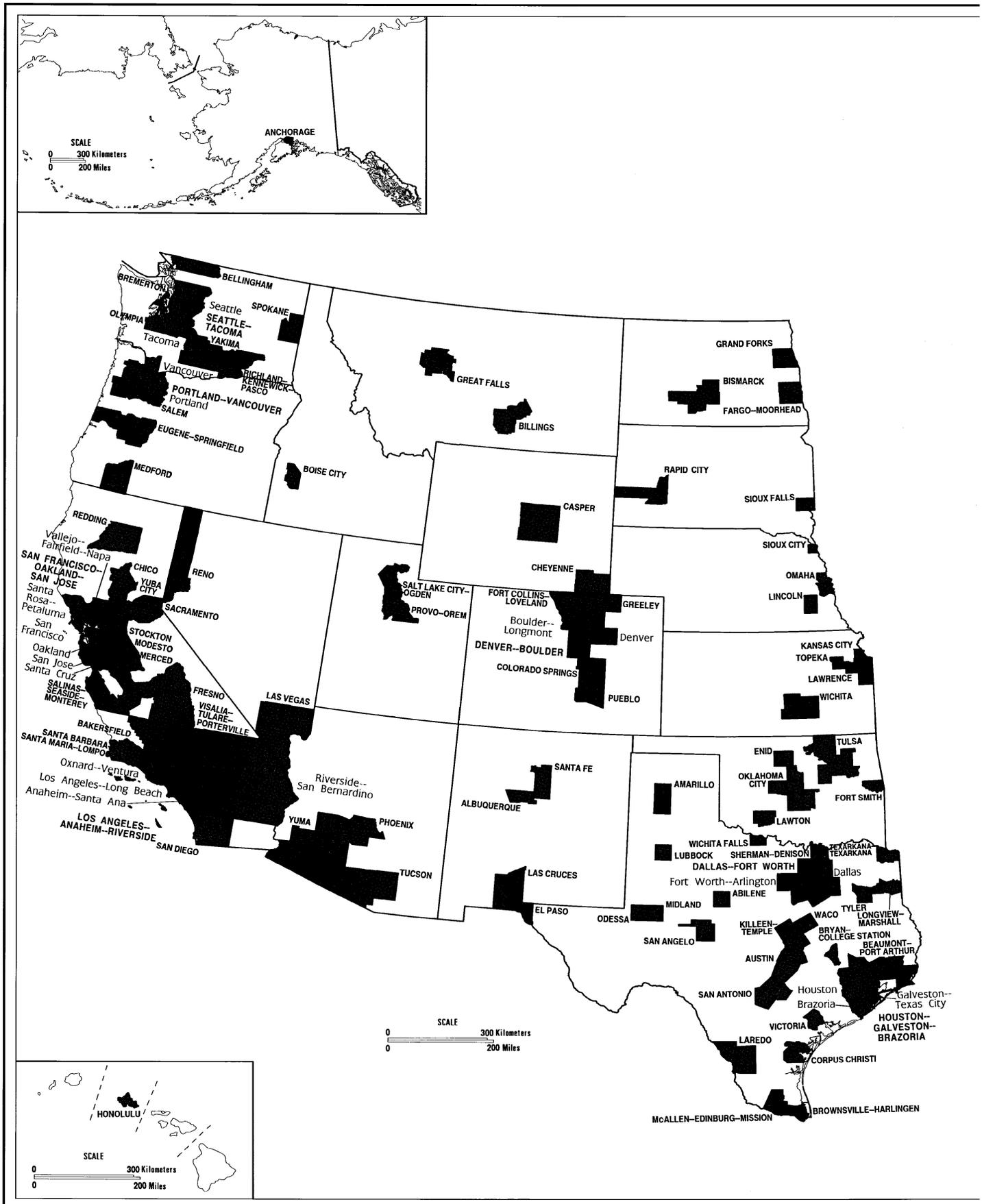
Data from the 1990 census are reported for the following types of geographic entities, developed primarily by the Bureau of the Census for statistical purposes:

**Regions and Divisions**—The United States is divided into four regions for the purpose of reporting census data: Northeast, South, Midwest, and West. (In 1980, the Midwest Region was known as the North Central Region.) Each region is divided into two or more divisions, for a total of nine. See figure 4-2.

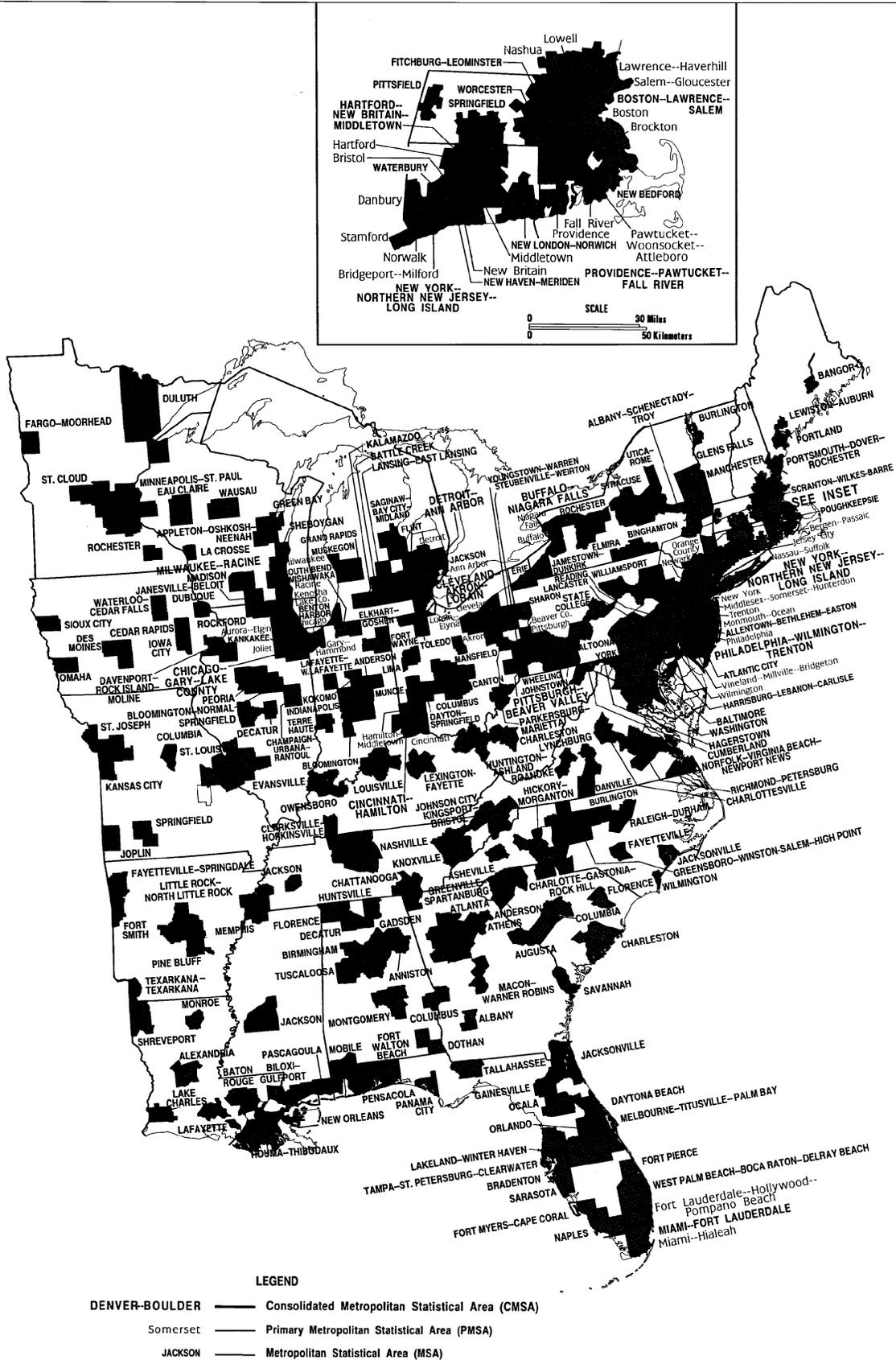
**Metropolitan Areas (MA's)**—These areas, shown in figure 4-3, are designated and defined by the Office of Management and Budget (OMB) following a set of published standards. To meet the needs of various groups of users, the standards provide for the establishment of three types of areas: metropolitan statistical areas (MSA's), consolidated metropolitan statistical areas (CMSA's), and primary metropolitan statistical areas (PMSA's). Collectively, these three types of areas are designated "metropolitan areas."

MA's are defined in terms of entire counties, except in the six New England States where cities and towns are used. MA's must contain either a city with at least 50,000 inhabitants or an urbanized area delineated by the Census Bureau; in the latter case, the MA must contain at least 100,000 people (75,000 in New England). The OMB also has established New England county metropolitan areas

Figure 4-3. Metropolitan Areas of the United States: 1990



U.S. DEPARTMENT OF COMMERCE Economics and Statistics Administration Bureau of the Census



(NECMA's) to provide county-based metropolitan areas in New England, but 1990 census data are not provided for NECMA's.

An MSA with a population of 1 million or more may be divided into component areas called PMSA's. A PMSA consists of one or more counties (cities and towns in New England) that demonstrate, based on specific criteria, strong internal economic and social links separate from the ties to other portions of the MSA. An MSA is redesignated as a CMSA if the OMB establishes PMSA's within the MSA. Every MSA and CMSA has one or more core places called "central cities"

Until June 30, 1983, MA's were referred to as "standard metropolitan statistical areas" (SMSA's) and "standard consolidated statistical areas" (SCSA's). The 1980 census included 323 SMSA's and 17 SCSA's. After the definition change in 1983, there were 257 MSA's and 23 CMSA's containing 78 PMSA's. As of June 30, 1990, there were 268 MSA's and 21 CMSA's containing 73 PMSA's. The OMB will redefine these areas late in 1992 based on the 1990 census data.

**Urbanized Areas (UA's)**—A UA comprises one or more places and the adjacent densely settled surrounding territory (urban fringe) that together have a minimum of 50,000 persons. The urban fringe generally consists of contiguous territory having a population density of at least 1,000 persons per square mile, but also may include similarly populated outlying territory that is within a specified number of miles from the boundary of the core of the UA. One or more central places function as the dominant centers of each UA. Unlike the 1980 census, a UA may have more than three central places, which includes each place that is a central city of a metropolitan area and lies within the UA. If the UA does not contain a metropolitan area central city, the central place(s) is determined by population size. The term "central place" is new for the 1990 census, primarily to avoid confusion with the MA "central city."

A UA generally is smaller than the MA with which it is associated, because UA's exclude rural territory and any urban places that are separated significantly from the UA by rural territory. Some UA's extend beyond the MA limits, and a few UA's comprise urbanized territory in two or more adjacent MA's. Some MA's also contain all or parts of two or more UA's. A few UA's are not in any MA. There were 373 UA's for the 1980 census and 405 for the 1990 census.

**Alaska Native Village Statistical Areas (ANVSA's)**—Alaska Native villages (ANV's) consist of tribes, bands, clans, villages, communities, or associations established pursuant to the Alaska Native Claims Settlement Act. Because these areas do not have legal boundaries, the Census Bureau established 217 ANVSA's (compared to 209 ANV's for the 1980 census) in cooperation with officials of each participating Alaska Native Regional Corporation (ANRC). ANVSA's replace the Alaska Native Villages recognized in the 1980 census. They do not cross ANRC boundaries.

**Tribal Jurisdiction Statistical Areas (TJSA's)**—The Census Bureau permitted officials of Federally-recognized tribes in Oklahoma that do not have legally established reservations to delineate TJSA's for purposes of data presentation. A TJSA contains the American Indian population over which one or more tribal governments have jurisdiction. There are 17 TJSA's, including two overlap areas claimed by two sets of tribal officials. These entities replace the Historic Areas of Oklahoma used in the 1980 census.

**Tribal Designated Statistical Areas (TDSA's)**—Officials of Federally- and State-recognized tribes (outside Oklahoma) that do not have legally established reservations delineated TDSA's containing the American Indian population over which they have jurisdiction. There are 19 TDSA's. These entities, identified for purposes of data presentation, are new for the 1990 census.

**Census Subareas**—These subdivisions of the boroughs and census areas (county equivalents) in Alaska were delineated cooperatively by the State of Alaska and the Census Bureau.

**Census County Divisions (CCD's)**—These subdivisions of counties have been established by the Census Bureau, in cooperation with State and local officials, in 22 States that do not have MCD's or where the MCD's are not adequate for reporting subcounty statistics. For the 1990 census, CCD's replace MCD's in Nevada. During the 1980's there were a small number of changes in the numbers, names, and boundaries of existing CCD's. There are 5,581 CCD's for the 1990 census, compared to 5,512 for the 1980 census.

**Unorganized Territories (UT's)**—In nine States in which the Census Bureau recognizes MCD's as county subdivisions for the purpose of decennial census data presentation, a UT is the portion of a county that is not included in any MCD or incorporated place. The Census Bureau identifies each separate area of unorganized territory as one or more county subdivisions for purposes of data presentation, with each UT given a unique name. There are 282 UT's for the 1990 census; the 1980 census reported data for 274 UT's.

**Census Designated Places (CDP's)**—These statistical areas are designed to identify significant population concentrations that are not in incorporated places, but have characteristics similar to incorporated places, such as community identity and high population density. In Puerto Rico, CDP's are referred to as zonas urbanas and comunidades (the latter were called aldeas in 1980). For the 1980 census, a CDP was required to have at least 5,000 persons if it was located in an urbanized area with a central city of at least 50,000 persons, and 1,000 persons in most other parts of the country. For the 1990 census, the minimum population size for a CDP was changed to 2,500

persons if the CDP was located within a 1980 urbanized area (except Hawaii and Puerto Rico). Elsewhere, settlements still must have at least 1,000 persons to qualify, with the following exceptions: Hawaii and the outlying areas: minimum of 300 persons; Alaska: minimum of 25 persons; American Indian reservations: minimum of 250 persons; and Puerto Rico zona urbana or the capital of an outlying area: no minimum. (CDP's for the 1990 census were qualified based on postcensus local review counts, not final counts, so some CDP's might be included that contain less than the minimum.) Changes in population distribution, new incorporations, and alterations in the boundaries of adjacent incorporated places affect the numbers, names, and boundaries of CDP's. The number of CDP's increased from 3,733 in 1980 to 4,423 in 1990.

**Census Tracts**—Census tracts are small areas with generally stable boundaries, defined within counties and statistically equivalent entities, usually in metropolitan areas and other highly populated counties. They are designed by local committees of data users to be relatively homogeneous with respect to population characteristics, economic status, and living conditions at the time they are established. Census tracts average 4,000 persons, but the number of inhabitants generally ranges from 2,500 to 8,000 persons. Census tract boundaries are established with the intention that they remain fixed so that statistical comparisons can be made from one census to another. However, mergers, splits, and revisions may affect their codes and boundaries. The number of census tracts increased from 43,691 for the 1980 census to 50,690 for the 1990 census.

**Block Numbering Areas (BNA's)**—BNA's are small statistical subdivisions of a county. They are used for grouping and numbering blocks in all counties and statistically equivalent entities without census tracts. BNA's are delineated by State agencies and the Census Bureau, following Census Bureau guidelines. The 1990 census includes 11,586 BNA's, compared to 3,423 for the 1980 census.

**Block Groups (BG's)**—BG's are combinations of census blocks within census tracts and BNA's. All the blocks in a BG have the same first digit in their identifying numbers; e.g., BG 4 contains all blocks numbered from 401 to 499 in a census tract or BNA. The number of block groups is 229,192 for the 1990 census; data are provided, however, for each of the more than 360,000 portions of BG's split by place, MCD, and other boundaries. Because the entire Nation and its territories are subdivided into blocks for the first time for the 1990 census, BG's now blanket all areas, replacing the enumeration districts (ED's) for which the Census Bureau reported data in many areas (mainly rural) for the 1980 census.

**Blocks**—These are the smallest geographic units for which the Census Bureau tabulates data. For the 1990 census, the Census Bureau numbered blocks throughout

the Nation and its territories for the first time. Many 1980 census blocks were revised and renumbered to meet the requirement that their boundaries follow visible features such as streets, streams, and railroad tracks, as well as to reflect new and corrected street patterns. Unlike the 1980 census, blocks are not split between geographic entities; rather, a unique three-digit block number, sometimes with an alphabetic suffix, applies to each entity. For example, the 1980 census reported data for the place and nonplace portions of block 101; in the 1990 census, there are data for two specific block numbers: 101A inside the place and 101B outside. For the 1990 census, the entire United States and its territories were divided into more than 7 million blocks. For the 1980 census, data were tabulated for only 2.5 million blocks; in nonblock-numbered areas, the ED, usually covering a much larger area than a block, was the smallest area for which the Census Bureau tabulated data.

## HIERARCHICAL RELATIONSHIPS

The Census Bureau organizes geographic entities into hierarchies for tabulating and reporting statistics. The entities included in these hierarchies range from census blocks (the smallest and most numerous type of entity) to the United States. The relationships among the most common units of census geography and the way they overlap are illustrated in figure 4-4.

States are combined to form divisions and regions, and are subdivided into counties and statistically equivalent

Figure 4-4. Basic 1990 Census Geographic Hierarchy

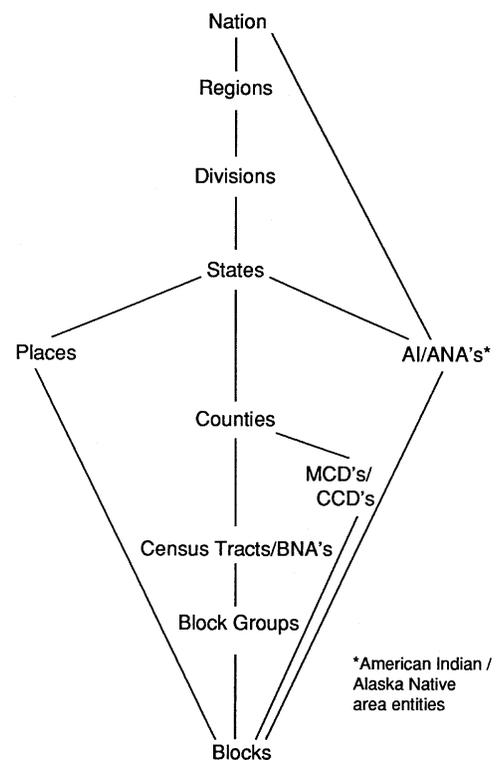


Figure 4-5. Number of Counties, and Number and Type of County Subdivisions and Places: 1990

State or Other Area	Counties	County subdivision		Places	
		Type	Number	Incorporated Places	Census Designated Places
Alabama .....	67	CCD	390	439	34
Alaska .....	25	Census Subarea	40	152	165
Arizona .....	15	CCD	78	86	93
Arkansas .....	75	MCD/ UT	1,335	487	14
California .....	58	CCD	386	456	420
Colorado .....	63	CCD	208	267	42
Connecticut .....	8	MCD	169	31	86
Delaware .....	3	CCD	27	57	15
District of Columbia .....	1	City	1	1	0
Florida .....	67	CCD	293	390	365
Georgia .....	159	CCD	581	535	64
Hawaii .....	5	CCD	44	-	125
Idaho .....	44	CCD	170	200	3
Illinois .....	102	MCD	1,679	1,279	29
Indiana .....	92	MCD	1,008	566	24
Iowa .....	99	MCD/ UT	1,656	953	2
Kansas .....	105	MCD/ UT	1,543	627	4
Kentucky .....	120	CCD	475	438	33
Louisiana .....	64	MCD/ UT	627	301	90
Maine .....	18	MCD/ UT	530	22	84
Maryland .....	24	MCD	298	155	174
Massachusetts .....	14	MCD	351	39	192
Michigan .....	83	MCD	1,525	534	86
Minnesota .....	87	MCD/ UT	2,742	854	9
Mississippi .....	82	MCD	410	295	29
Missouri .....	115	MCD	1,368	942	19
Montana .....	57	CCD	193	128	34
Nebraska .....	93	MCD	1,255	535	4
Nevada .....	17	CCD	67	18	38
New Hampshire .....	10	MCD	259	13	47
New Jersey .....	21	MCD	567	320	179
New Mexico .....	33	CCD	131	98	76
New York .....	62	MCD	1,013	619	350
North Carolina .....	100	MCD/ UT	1,040	511	100
North Dakota .....	53	MCD/ UT	1,806	366	10
Ohio .....	88	MCD	1,553	941	111
Oklahoma .....	77	CCD	302	592	6
Oregon .....	36	CCD	211	241	43
Pennsylvania .....	67	MCD	2,584	1,022	275
Rhode Island .....	5	MCD	39	8	19
South Carolina .....	46	CCD	294	270	72
South Dakota .....	66	MCD/ UT	1,389	310	24
Tennessee .....	95	CCD	462	336	37
Texas .....	254	CCD	863	1,171	105
Utah .....	29	CCD	90	228	27
Vermont .....	14	MCD	255	51	18
Virginia .....	134	MCD	500	229	116
Washington .....	39	CCD	245	266	160
West Virginia .....	55	MCD	277	230	47
Wisconsin .....	72	MCD	1,894	583	35
Wyoming .....	23	CCD	71	97	12
<b>TOTAL, U.S.</b> .....	<b>3,141</b>		<b>35,298</b>	<b>19,289</b>	<b>4,146</b>
American Samoa .....	5	MCD	16	73	0
Guam .....	1	Guam	19	-	32
Northern Mariana Islands .....	4	MCD	18	-	16
Palau .....	16	MCD	19	-	3
Puerto Rico .....	78	MCD	899	-	220
Virgin Islands .....	3	MCD	20	3	6
<b>TOTAL</b> .....	<b>3,248</b>		<b>36,289</b>	<b>19,365</b>	<b>4,423</b>

Figure 4-6. **Excerpt From a 1990 Summary Population and Housing Characteristics Report (CPH-1-27)**

Table 1. **Age: 1990—Con.**  
 [For definitions of terms and meanings of symbols, see text]

State County County Subdivision Place	All persons
Boone County .....	12 379
Bourbon township .....	2 140
Sturgeon city .....	838
Cedar township .....	9 233
Ashland city.....	1 252
<b>Columbia city (pt.).....</b>	<b>215</b>
Hartsburg town .....	131
Centralia township .....	4 143
Centralia city (pt) .....	3 414
Columbia township .....	38 240
<b>Columbia city (pt.) .....</b>	<b>29 871</b>
Missouri township.....	49 428
<b>Columbia city (pt.) .....</b>	<b>39 015</b>
Rocheport city .....	255
Perche township .....	3 475
Harrisburg town.....	169
Rocky Fork township .....	5 720
<b>Columbia city (pt.) .....</b>	<b>—</b>
Hallsville city .....	917

entities, which are further subdivided into legal entities (minor civil divisions) and statistical entities (primarily census county divisions). Figure 4-5 shows the number of counties and the number and types of county subdivisions and places within each State.

In many States, incorporated places are part of the MCD's in which they are located; for example, a village within and legally part of a township. In some States, incorporated places are independent of the adjacent county subdivisions and, therefore, the Census Bureau also treats them as the statistical equivalents of county subdivisions. In a few States, the pattern is mixed. CDP's always are part of the county subdivisions in which they are located, and places in CCD States always are part of the CCD's. Many places cross county subdivision boundaries and some cross county boundaries—but places never cross State boundaries.

In the statistical tables of most reports and in the summary tape files, places are presented in alphabetical order within the State. In some tape series and a few tables, the presentation is hierarchical, as shown in an example from a 1990 *Summary Population and Housing Characteristics* State report (fig. 4-6). In this example, parts of Columbia city, an incorporated place, are found in four MCD's: Cedar township, Columbia township, Missouri township, and Rocky Fork township. In the report, data are

given for that part of Columbia city that exists in each MCD. To find the total population for Columbia city (69,101), add 215; 29,871; and 39,015; or look at the comparable table with places listed alphabetically within the State.

Most counties in metropolitan areas are divided into census tracts; nonmetropolitan counties generally are divided into block numbering areas (BNA's), but highly populated and some other counties that took the initiative to form a local committee do have census tracts. Both census tracts and BNA's are further divided into block groups (BG's). Census tract and BNA boundaries may cross place, county subdivision, and other boundaries, but they never cross State or county lines. The presentation of census tracts and BNA's varies, depending on the data product. In some summary tape files, separate summaries recognize all higher-level boundaries; for example, if a census tract or BNA falls in two or more MCD's, data summaries are presented for the parts of the census tract or BNA in each MCD as well as the entire census tract/ BNA. In other tape files and in 1990 CPH-3, *Population and Housing Characteristics for Census Tracts and Block Numbering Areas*, data summaries for the census tract or BNA components are given only when the census tract or BNA contains the part of a place with a population of 10,000 or more.

BG's never cross census tract or BNA boundaries (and therefore, never cross county boundaries), but may cross the boundaries of other entities. The census files provide separate data for each portion of a BG that lies in more than one entity. For example, statistical summaries recognize the component parts of a BG when it is split by the boundaries of American Indian/ Alaska Native areas, county subdivisions, or places.

At the bottom of the hierarchy, census blocks are numbered uniquely within each census tract or BNA, and are combined to form BG's.

Geographic entities also can be divided into urban and rural categories. This classification cuts across other hierarchies; for example, there generally are both urban and rural territory within metropolitan and nonmetropolitan areas. "Urban" comprises all territory, population, and housing units in urbanized areas and in non-UA places of 2,500 or more persons; however, it excludes persons living in the rural portions of "extended cities"—a concept that the Census Bureau applied not only to places within UA's, but, for the first time, to other incorporated places that contained large areas of sparsely settled territory.

Territory, population, and housing units not classified as urban constitute "rural." Rural population and housing units are subdivided into "rural farm" and "rural nonfarm." "Rural farm" includes all rural households and housing units on farms from which \$1,000 or more of agricultural products were sold in 1989; the remaining rural population and housing units are termed "rural nonfarm."

**ESTABLISHING GEOGRAPHIC ENTITY BOUNDARIES**

State and local authorities establish the boundaries for most legal and administrative areas. For tabulating the

1990 census data, the Census Bureau recognized the boundaries legally in effect on January 1, 1990, as reported by State and local officials in response to the Census Bureau's annual Boundary and Annexation Survey. The Office of Management and Budget establishes MSA's, CMSA's, and PMSA's. The Census Bureau is responsible for establishing the guidelines used to delineate the boundaries of most other statistical entities, although it considers recommendations and information from State and local officials based on specific criteria or guidelines. Urbanized areas, however, are delineated by the Census Bureau based strictly on the application of the UA criteria to the census counts; there is no local input in their delineation.

Census statistical areas committees (CSAC's) are important in the delineation of local statistical areas. Members typically include representatives from city and county government agencies, tribal councils, chambers of commerce, councils of government, neighborhood associations, universities, citizens' groups, newspapers, and local business firms. Each committee knows its communities, their interrelationships, and other facts needed to select useful boundaries. Following Census Bureau guidelines, the CSAC's recommend revisions to existing boundaries and help to identify and delineate boundaries for newly established statistical entities, especially census tracts, BG's, and CDP's.

In areas without CSAC's, the Census Bureau designated a State agency—usually the State Data Center—to coordinate participation in the Block Numbering Areas Program to delineate BNA's and BG's. For American Indian reservations with at least 1,000 persons, the tribal governments also were given the opportunity to delineate BNA's and BG's. State and tribal officials were offered the chance to delineate CDP's.

## **HISTORICAL COMPARABILITY OF GEOGRAPHIC ENTITIES**

Data users comparing 1990 census data with the data from previous censuses need to be aware of boundary changes. State and county boundaries rarely change, but the boundaries of virtually all other legal and statistical entities may change over the decades. Such boundary changes may affect the data user's ability to make accurate comparisons of data from census to census.

During the 1980's—as was true for all recent decades—almost half the incorporated places had boundary changes, and many CDP's were redefined. Although MCD's are less likely to change, annexations by adjoining places, mergers, and dissolutions affect their boundaries in some States. Data users dealing with statistics for a particular county, county subdivision, place, or American Indian/ Alaska Native areas may refer to the User Notes published in the 1990 CPH-2, Population and Housing Unit Counts, for each State to determine if boundary and other changes have taken place between the 1980 and 1990 censuses.

Census tracts are defined with an overall goal of census-to-census comparability, but some divisions, combinations, and boundary adjustments are made for each census. In

addition, for the 1990 census, some very small census tracts were created during data collection activities. Such tracts, suffixed .80 through .98, may be summarized with an adjacent census tract for purposes of data comparability and analysis. Also, census tracts that previously “nested” to coincide with MCD's or places might no longer do so for the 1990 census. Boundary comparisons between 1980 and 1990 census tracts can be made using record types 1 and 3 of the 1990 Census TIGER/Line™ file or the TIGER/Census Tract Comparability™ file, both of which are discussed below.

Metropolitan areas are redefined after each decennial census, and additional ones may be established between censuses based on the Census Bureau's official population estimates and special censuses. The OMB created nine new MSA's since it redefined MA's in 1983: Naples, FL; Santa Fe, NM; Cheyenne, WY; Jackson, TN; Rapid City, SD; Merced, CA; Decatur, AL; Jamestown-Dunkirk, NY; and Yuma, AZ. Two MSA's gained an additional county and one gained a portion of a county. A new central city was designated in each of eight MSA's.

## **TIGER FILES AND RELATED PRODUCTS**

For the 1990 census, the Census Bureau, in cooperation with the U.S. Geological Survey (USGS), developed the TIGER (Topologically Integrated Geographic Encoding and Referencing) System, which allows all relevant geographic information about an area to be entered into a computer-readable data base. The geographic activities required to support the census included assigning each address to its correct geographic location (census block and other entities) and classifying that location within the other tabulation units represented in the census (census tract/BNA, place, county subdivision, etc.), generating maps at various scales for any part of the United States and its territories, and updating boundary information to reflect corrections reported during census field operations and by the Local Review Program. The TIGER System automated these activities.

In the past, geographic preparations were performed in separate, complex clerical operations. The GBF/DIME-Files used for the 1980 census contained computerized representations of detailed street maps, but were limited to the less than two percent of the United States included in the densely settled core of the Nation's metropolitan areas. They also contained nonstreet features such as railroads, rivers, and legal and statistical boundaries; feature name and attribute information; geographic coordinates for segment end points; and geographic codes and address ranges for both sides of each street segment or other feature. The GBF/DIME-Files were merged into the TIGER data base.

The TIGER data base contains information about streets and roads, such as their names, geographic coordinates pinpointing their intersections and defining their paths, and, primarily in the areas covered by the 1980 GBF/DIME-Files, the range of address numbers located along each

side of a street. It also contains railroads, hydrographic features and their associated names, and the boundaries, names (where applicable), and numeric codes for all the geographic entities for which the Census Bureau tabulates data for the 1990 census. However, it does not contain any 1990 census data.

The master reference file (MRF) provided the Census Bureau with a 1980 census geographic base, documenting the geographic codes and the relationship among the tabulation units recognized for the census. This function is now included in both the TIGER data base and the geographic portion of each record in all 1990 summary tape files, eliminating the need for the MRF.

Some maps for the 1980 census were difficult to read and inconsistent with the GBF/DIME-Files and/or the MRF; especially the published block-numbered maps did

not always reflect the published data. There was little flexibility in altering map size and scale. In addition to greatly expanding the Census Bureau's map production capabilities, the TIGER System permits the convenient, ongoing entry of map corrections to the data base.

### TIGER/Line™ Files

Selected geographic and cartographic information from the TIGER data base has been released in the form of the 1990 Census TIGER/Line™ files—available by county and statistically equivalent entity. These files cover the entire United States, Puerto Rico, the Virgin Islands of the United States, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, the Republic of Palau, and the remainder of the former Trust Territory of the Pacific Islands (the Federated States of Micronesia and the Marshall Islands). The first version issued was the Prototype TIGER/Line™ file. This file was replaced by the precensus TIGER/Line™ file, which contained updates of legal/administrative boundaries to January 1, 1988; permanent record numbers; Federal Information Processing Standard (FIPS) Publication 55 codes for places, county subdivisions, and AI/ANA's; and minor modifications to the record format.

A third version of the TIGER/Line™ file was the Initial Voting District Codes, released in late 1990 to replace the precensus version. It updated the precensus file with the initial set of January 1, 1990, legal boundaries, the initial assignment of voting district codes, and many of the precensus local review and enumerator updates of map features. This version also related an internal point (latitude/longitude) to every polygon, and added point and area landmark information.

The 1990 Census TIGER/Line™ file replaces the Initial Voting District Codes file. It contains geographic information for the final AI/ANA's, county subdivisions, places, census tracts/BNA's, tabulation blocks, and voting district codes. Address range information was extended beyond what appeared in the 1980 GBF/DIME-File for 20 MA's; also, files were prepared in 1983 for 66 additional areas, and similar information was inserted in 1990 for 7 areas. This version added record types A and R. The information is organized into the 12 record types described below:

Figure 4-7. TIGER/Line™ File Record Type 1—1990 Census Version

**Illustrative Record**

10003..75982139.AN.Chambliss.....St..A40.....1000.....1046  
 .....1001.....1047000022312231.....51515105100100001000  
 0100001000200197200197103A104...-77140800+38825100...-77139800+38825300

**Interpretation of Record Elements.** (Note: number of digits noted is the maximum number allowed; if fewer digits or letters are needed, the unused space is represented by dots)

- 1-digit record type number (1)
- 4-digit version number (0003)
- 10-digit record number (75982139)
- 1-digit code for line segment with information on 1 side only (.)
- 1-digit source code (A) (1980 GBF/Dime-File)
- 2-digit feature direction (N)
- 30-digit feature name (Chambliss)
- 4-digit feature type (St)
- 2-digit feature direction suffix (..)
- 3-digit census feature class code (A40) (neighborhood roads, city streets, unimproved roads)
- 11-digit "from" address left (1000)
- 11-digit "to" address left (1046)
  
- 11-digit "from" address right (1001)
- 11-digit "to" address right (1047)
- 1-digit "from" imputed address flag left (0)
- 1-digit "to" imputed address flag left (0)
- 1-digit "from" imputed address flag right (0)
- 1-digit "to" imputed address flag right (0)
- 5-digit ZIP Code left (only when address range is present) (22311)
- 5-digit ZIP Code right (only when address range is present) (22311)
- 14-digit field for areas not represented in this record
- 2-digit Federal Information Processing Standards (FIPS) State code left side (51) (Virginia)
- 2-digit FIPS State code right side (51) Virginia
- 3-digit FIPS county code left side (510) Alexandria city
- 3-digit FIPS county code right side (510) Alexandria city
- 5-digit FIPS county subdivision code left (01000)
- 5-digit FIPS county subdivision code right (01000)
  
- 5-digit FIPS place code left (01000)
- 5-digit FIPS place code right (01000)
- 6-digit census tract/BNA code left (2001.97)
- 6-digit census tract/BNA code right (2001.97)
- 4-digit tabulation block number (103A)
- 3-digit collection block number (104)
- 10-digit longitude from -77140800
- 9-digit latitude from +38825100
- 10-digit longitude to -77139800
- 9-digit latitude to +38825300

**Record type 1** contains a single record for each unique line segment “chain” in the TIGER/Line™ file. The information in a record is illustrated in figure 4-7. The latitude and longitude coordinates are shown for the beginning and end points of each line segment. The permanent record number, which is unique to each line segment within the entire set of TIGER/Line™ files, is used to link information among record types 1 through 4, 6, and I.

**Record type 2** contains the shape points (latitude and longitude coordinates) that describe the shape of each line segment that is not straight. Figure 4-8 illustrates the importance of an accurate description of a road’s shape. A record type 2 exists for each line segment in record type 1 unless the line segment is straight. Both record types 1 and 2 are needed to construct a map or perform related calculations.

**Record type 3** contains the 1980 FIPS codes for State and county; the 1980 Census Bureau and FIPS 55 codes for county subdivision and place; the 1980 census tract numbers; the 1980 block numbers in GBF/DIME-File areas; and the 1990 Census Bureau codes for AI/ANA, county subdivision, sub-MCD, place, and voting district.

**Record type 4** provides an index to alternate feature names associated with the basic line segments in record type 1. For example, a line segment in record type 1 named Main Street may be known by one or more other

names, such as State Highway 12. Record type 4 provides a temporary feature identification (ID) number for each alternate name, and record type 5 lists the actual names by feature ID code. Figure 4-9 shows the layout for record types 4 and 5. If a line segment shown in record type 1 has only one name, there will not be a record type 4 entry for it.

**Record type 5** lists all the line segment feature names in the TIGER/Line™ file by their temporary feature identification number. See figure 4-9.

**Record type 6** contains additional ZIP Codes and address ranges associated with record type 1. This record would be needed, for example, where an address is not consistent with the rest of the block; e.g., an odd-numbered house on the even-numbered side of a street. Any ZIP Codes and address ranges that do not fall within the normal ranges, for whatever reason, are included in this record. Users must use all the information in record type 6, the address range information in record type 1, and any alternate names in record type 4 to have complete address information for each side of a street segment.

**Record type 7** contains landmark names and the coordinates for point landmark features such as cemeteries, churches, and schools. It also contains the names of double-line rivers, water bodies, and military installations.

**Record type 8** contains the polygon identifiers for area landmarks such as golf courses, parks, and military installations, double-line drainage features, and bodies of water.

**Record type I** associates each record type 1 with the polygons on either side of each line segment.

**Record type P** contains the latitude and longitude of an internal point for every enclosed area (polygon) in the file.

**Record type A** provides a summary of the geographic codes for every polygon in the TIGER data base, including the 101st Congressional Districts. Also provided are the basic census geographic entity codes: State, county, county subdivision, place, AI/ANA, census tract/ BNA, and block.

**Record type R** provides the minimum, maximum, and current high values for the permanent record number within each TIGER/Line™ file partition (county or statistically equivalent area).

In the TIGER/Line™ files, record types 1, 2, 3, 4, 6, and I are linked by the record number; record types 4 and 5 are linked by the permanent feature identification code; record type 5 is linked to record type 4 by the temporary feature identification code; record types 7 and 8 are linked by the temporary landmark identification code; and record types 8, A, I, and P are linked by the temporary polygon identifier.

Figure 4-8. **Coordinate Values for Feature End Points and Shape Points**

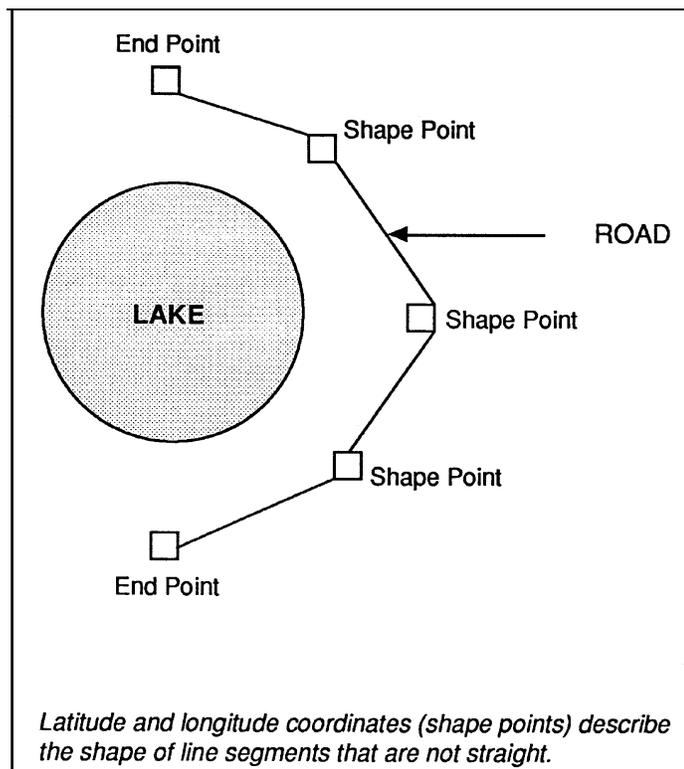


Figure 4–9. **Description of Record Types 4 and 5 Contents**

*Record Type 4 Illustration:*

40003 2000657792 1.....3

The first number (4) stands for record type 4; the next four digits are reserved for the version number (1990 census version); 2000657792 is the 10-digit permanent record number. The “1” refers to the record sequence number, meaning that there is only one record type 4 for this permanent record number. In this example, a line segment, identified by record number 2000657792, is known by one alternate name, identified by “3”. Space is provided (represented by dots) for up to five alternate names. To determine what that name is, refer to feature identification number 3 in record type 5 illustrated below. In this case, the alternate name is StHwy 38.

*Record Type 5 Illustration:*

546035	1	James	
546035	2	Dry	
546035	3	StHwy 38	
546035	4	Rock	
546035	5	Firesteel	
546035	6	Enemy	
546035	7	South Dakota State	
546035	8	I-90	
546035	9	C and NW Railway Abnd	
546035	10	2nd	
546035	11	1st	
546035	12	Walnut	St
546035	13	Main	St
546035	14	Airport	Road

The first number (5) stands for record type 5. The next two digits are the FIPS State code (46), and 035 is the FIPS county code. The next column contains the feature identification number (3), and the last two columns are the feature name (StHwy 38) and type, if applicable.

The geographic codes found in record types 1, 3, and A can be used in matching the 1990 census statistical data to their geographical entities.

**Using TIGER/Line™ Files**

The geographic and cartographic information in a TIGER/Line™ file can be combined with statistical data such as population, housing, income, or any other type of data, using a mainframe computer, workstation, minicomputer, or personal computer. Computer mapping, using the TIGER/Line™ files supplemented by other information and capabilities, is an invaluable tool for interpreting data. State and local governments can use TIGER/Line™ files for resource allocations, site analysis, and emergency vehicle routing. Businesses such as utility companies, banks, insurance companies, oil companies, and delivery companies can use the files as the basis for market studies, determination

of delivery routes, and service equipment location. Network analysis allows users to find the ideal route between two points whether it be the fastest (directing emergency vehicles) or the safest (movement of hazardous materials).

Geocoding allows users with local address files to relate them to particular geographic areas and then to the census and local data associated with these areas. By adding a geographic code, such as a census tract number, to records containing addresses, the data can be tabulated or displayed on a map, or compared with other information at the same geographic level.

The Census Bureau does not provide the applications software necessary to use the TIGER/Line™ files. A list of commercial software vendors who have notified the Census Bureau of their ability to work with the TIGER/Line™ files is available from Customer Services. (See the “Ordering Geographic Products” section.)

**Other TIGER Extract Files**

Additional extracts from the TIGER data base are listed below:

**TIGER/SDTS™ files**—These county files will contain all the information from the TIGER data base that appears in the TIGER/Line™ files. The files will be in the FIPS Spatial Data Transfer Standard (SDTS) format, require extensive working knowledge of the file format and structure, and require substantial computer programming experience. A number of commercial software vendors are likely to offer the capability to use the TIGER/SDTS™ files.

**TIGER/Boundary™ files**—These files will contain coordinate values for specific 1990 census tabulation-entity boundary sets. Six files are planned for release in 1993: State and county boundaries; census tract/ BNA and BG boundaries; county subdivision and place boundaries; urban area boundaries; AI/ ANA boundaries; and the 103rd Congressional District boundaries. Each file will be released in two versions: one with a full set of coordinates and one with a reduced set suitable for use on personal computers.

**TIGER/Census Tract Comparability™ file**—This National file contains records that compare 1980 and 1990 census tract numbers and geographic changes. It is available in a single National file.

**TIGER/GICS™ file**—This computer file will be similar to the *Geographic Identification Code Scheme* for the United States and its territories, described in the “Geographic Code Schemes” section. It provides the names and related geographic codes of the high-level legal and statistical entities for which the Census Bureau tabulates 1990 census data, as well as selected geographic data items, including area measurements, internal point coordinates, and population and housing counts.

**Figure 4–10. 1990 Census Data Product Maps**

**1. ELECTROSTATICALLY PLOTTED MAPS AVAILABLE SEPARATELY**

*(Contact Customer Services to order)*

County Block Maps (1990)	Census Tract/Block Numbering Area Outline Maps (1990)
P.L. 94-171 County Block Maps	Voting District Outline Maps (1990)
Entity-Based Block Maps (1990)	Urbanized Area Boundary Maps (1990)
County Subdivision Outline Maps (1990)	

**2. REFERENCE MAPS AND PUBLISHED REPORTS WHERE THEY APPEAR**

*(The reports listed are being published by the GPO on a flow basis through 1993.*

*Contact Customer Services or the GPO for ordering information.)*

Map Title	Report Series
The United States of America	1990 CPH 1-1, CPH 2-1, CPH-5-1 1990 CP-1-1, CP-2-1 1990 CH-1-1, CH-2-1
Census Regions and Divisions of the United States	1990 CPH-1-1, CPH-2-1, CPH-5-1 1990 CP-1-1, CP-2-1 1990 CH-1-1, CH-2-1
State and County Outline Maps	1990 CPH-1, CPH-2, CPH-5 1990 CP-1, CP-2 1990 CH-1, CH-2
State/Metropolitan Area Outline Maps	1990 CPH-2
Metropolitan Areas of the United States: 1990	1990 CPH-1-1, CPH-2-1, CPH-5-1 1990 CP-1-1, CP-1-1B, CP-2-1, CP-2-1B 1990 CH-1-1, CH-1-1B, CH-2-1, CH-2-1B
County Subdivision Outline Maps and Location Indexes	1990 CPH-1, CPH-2, CPH-5 1990 CP-1, CP-2 1990 CH-1, CH-2
Urbanized Area Outline Maps	1990 CPH-2
Urbanized Areas of the United States: 1990	1990 CPH-1-1, CPH-2, CPH-5 1990 CP-1-1, CP-1-1C, CP-2-1, CP-2-1C 1990 CH-1-1, CH-1-1C, CH-2-1, CH-2-1C
American Indian and Alaska Native Areas: 1990	1990 CPH-1-1, CPH-2-1, CPH-5-1 1990 CP-1-1, CP-1-1A, CP-2-1, CP-2-1A 1990 CH-1-1, CH-1-1A, CH-2-1, CH-2-1A
Congressional District Outline Maps for the 103rd Congress	1990 CPH-4

**3. THEMATIC MAPS INCLUDED IN PUBLISHED REPORTS**

*(These publications will be available from GPO.*

*Contact Customer Services for the latest ordering information.)*

Major Acquisitions of Territory by the United States and Dates of Admission of States	1990 CPH-2-1
Mean Center of Population of the United States: 1790-1990	1990 CPH-2-1
Median Center of Population of the United States: 1880 to 1990	1990 CPH-2-1
Population and Geographic Centers of the United States: 1990	1990 CPH-2-1

**TIGER/GRF-N™ files (Geographic Reference File-Names)**—These are State files of geographic names and codes for 1990 census geographic entities, presented in entity name sort.

**TIGER/Census Tract Street Index™ (CTSI)** —This index allows assignment of census tract numbers to street addresses in the urban core areas covered by the GBF/DIME-Files. A subsequent version will be expanded to contain address ranges in all areas for which the 1990 census records contain house-number/ street-name information, ZIP Codes, and 103rd Congressional District codes. This index is available on computer tape and print-outs from the tape.

**TIGER/Map Sheet Corner Point Coordinate™ file**—Though not an actual extract from the TIGER data base, this computer-readable file was prepared based on maps that were created for the 1990 census from the TIGER System. It provides the latitude and longitude coordinates of the four corner points for each map sheet of the Census Bureau's County Block Maps (1990) and P.L. 94-171 County Block Maps (1990). It allows users who want to digitize their own map corrections, updates, and additions to quickly register the map, or to produce their own map sheet for the area covered by each Census Bureau map.

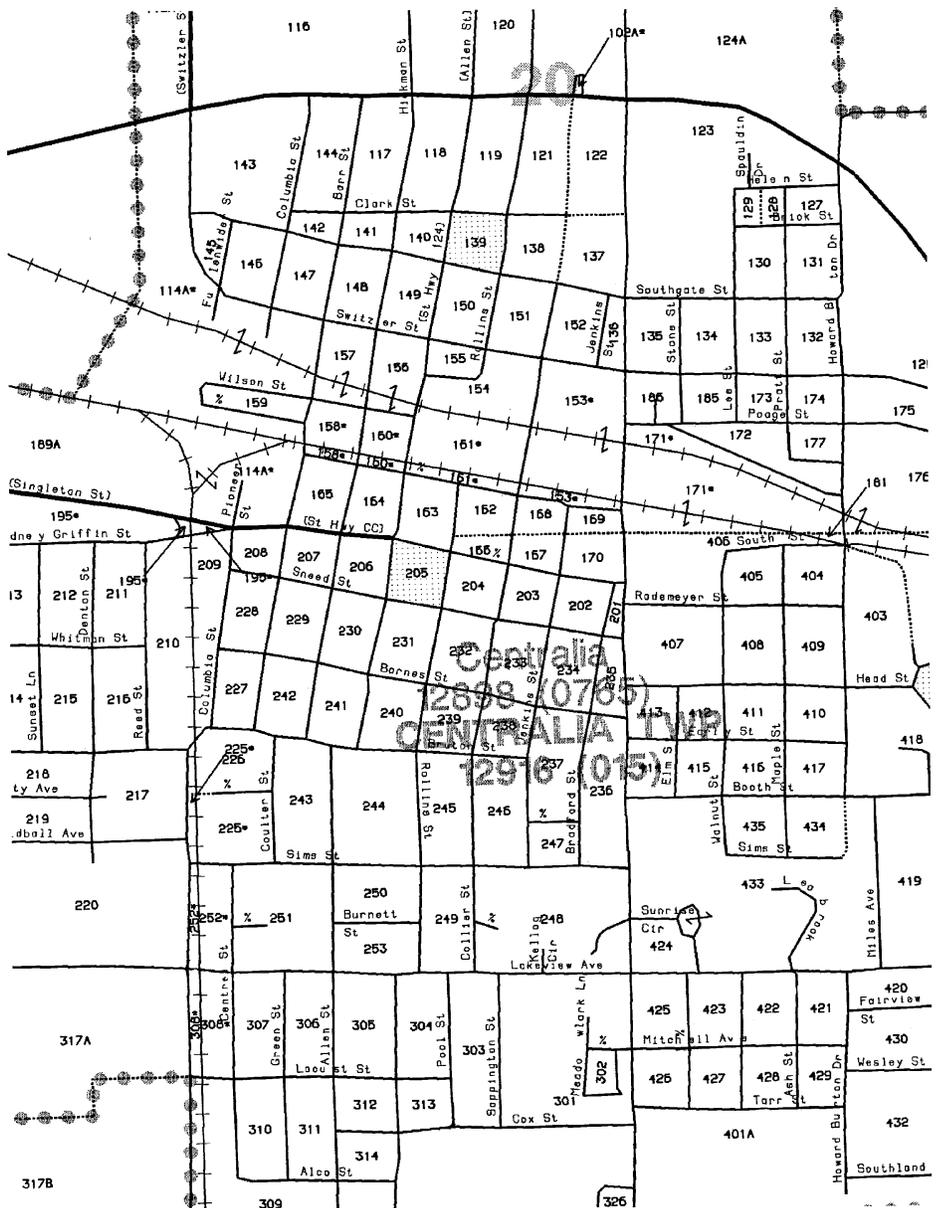
**1990 CENSUS MAPS**

The census of population and housing provides statistics for more types of geographic entities than any other data source. Maps developed for use in the 1990 census were produced from the TIGER System, as are all the 1990 census geographic products. They are designed for use with the data the Census Bureau tabulates. They are produced to appear in or accompany printed data reports, data microfiche, and summary tape files.

The maps are produced in two ways: electrostatically plotted (computer-generated) and printed. Electrostatically-plotted map sheets are sold separately from the printed reports, microfiche, computer tapes, or CD-ROM's. They include the County Block Maps, Entity-Based Block maps, County Subdivision Outline Maps, Voting District Outline Maps, Census Tract/BNA Outline Maps, and Urbanized Area Boundary Maps.

Other maps are produced through a regular printing process and either appear in the Census Bureau reports sold by the Government Printing Office (GPO) or are sold separately by the GPO.

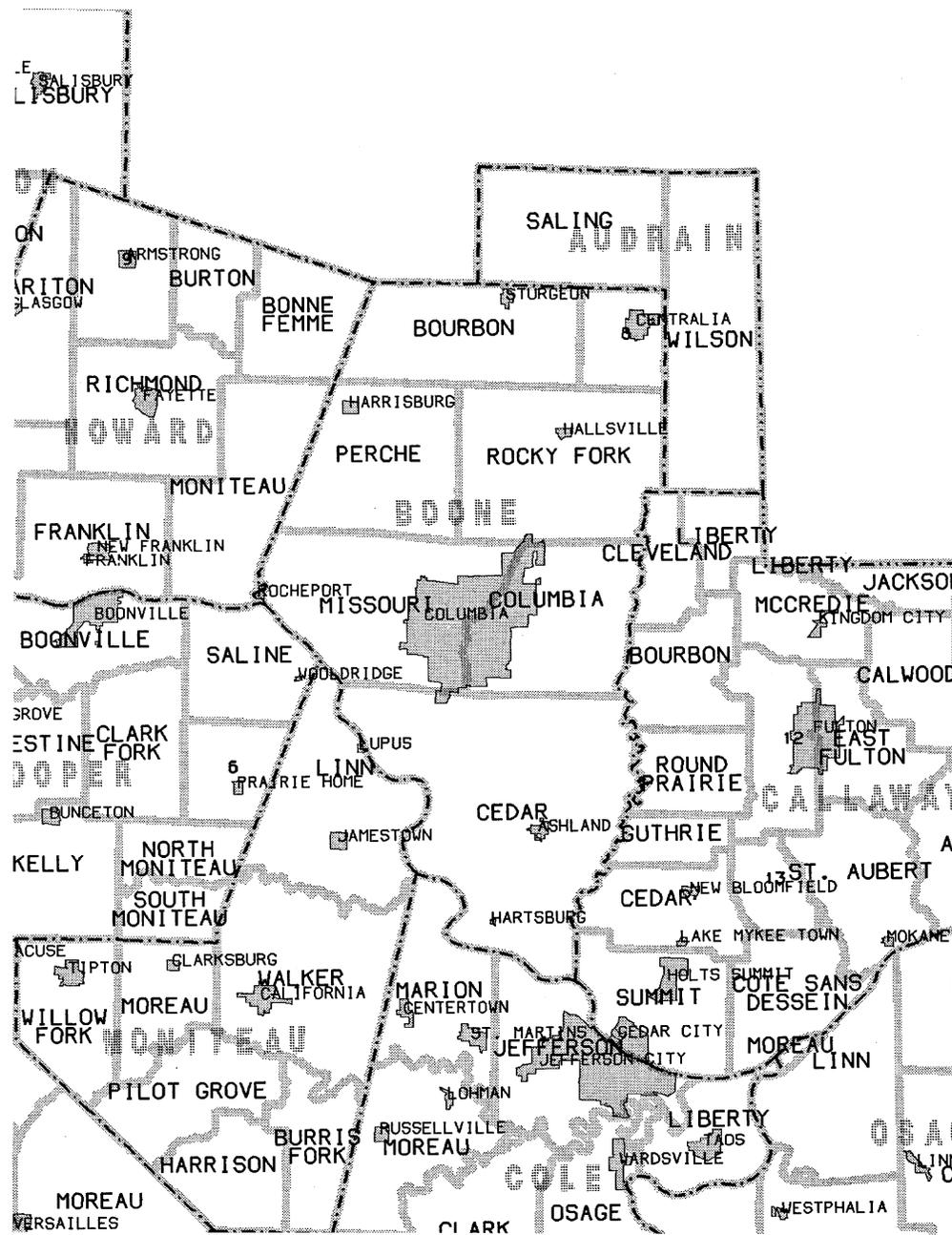
Figure 4-11. County Block Map Sample



All maps fall into one of three size categories: page size (8 1/2" x 11"), two-page size (11" x 17"), and full size (36" x 42"). Figure 4-10 summarizes the types of maps and the reports in which they appear.

**County Block Maps (1990) and P.L. 94-171 County Block Maps (1990)**—These large-scale, county-based maps are electrostatically plotted and show the greatest detail and the most complete set of geographic information. (See fig. 4-11.) Census blocks and their identifying numbers are shown along with other tabulation entity boundaries and ground features. Each map consists of one or more parent sheets at 1 of 11 standard scales, depending on the areal size and shape of the county, the number of blocks, and the density of the block pattern. Insets at a larger scale are used for densely settled areas and may require multiple sheets. An index map showing

Figure 4-12. County Subdivision Outline Map Sample



mapsheet and inset coverage is included. The maps are 36" x 42".

The P.L. 94-171 County Block Maps differ from the other County Block Maps by also depicting the voting district boundaries and codes in counties or portions of counties for which States provided that information for Phase 2 of the 1990 Census Redistricting Data Program. They cover only the areas with defined voting districts. The other 1990 census County Block Maps do not display voting districts and cover the entire county.

**Entity-Based Block Maps**—These maps will be produced in three series: American Indian Area Block Maps (1990), Alaska Native Area Block Maps (1990), and Place Block

Maps (1990) (for places that straddle a county boundary). The content is the same as the County Block Maps, but scales are designed to focus coverage on selected governmental units and statistically equivalent entities other than counties.

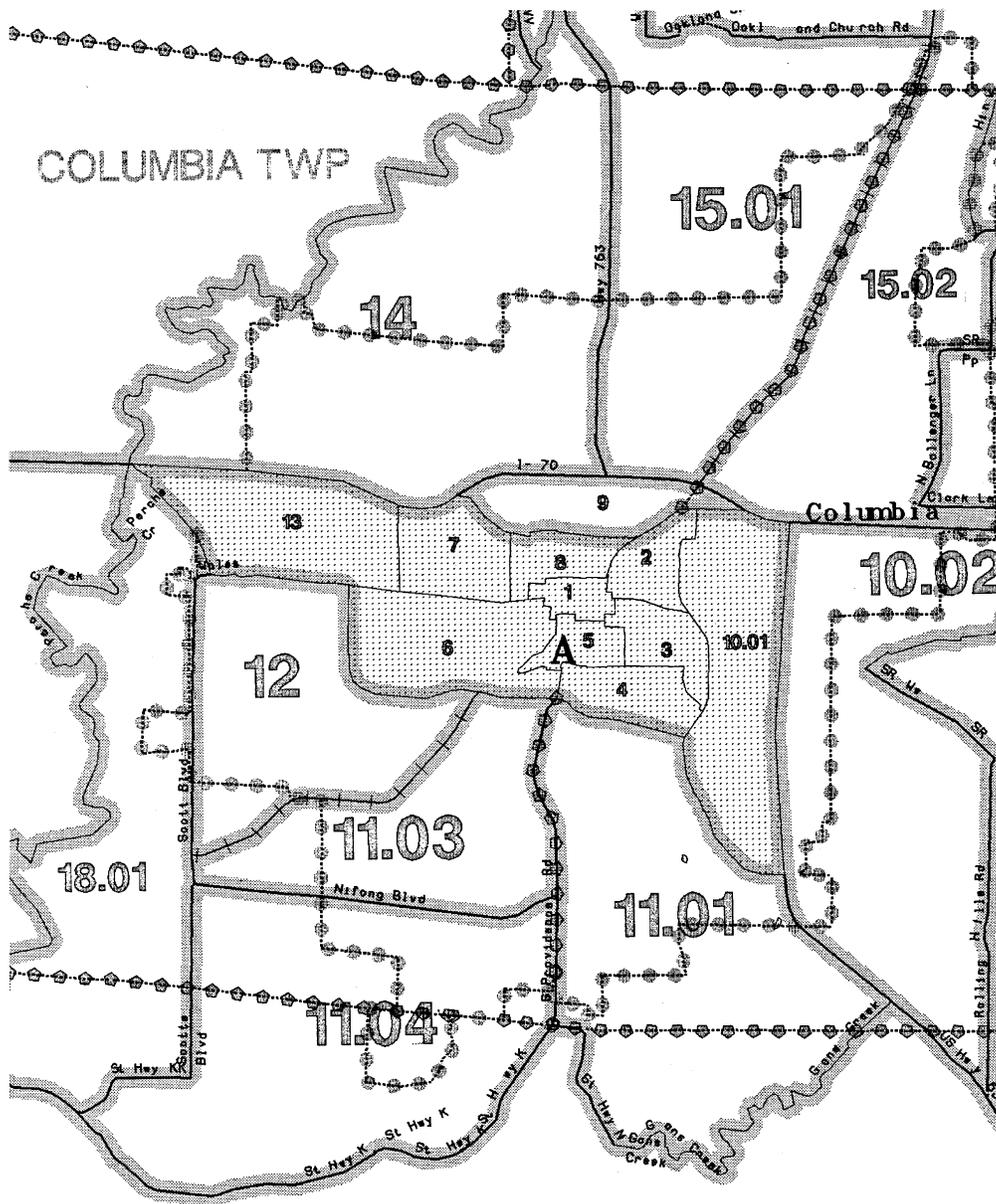
**County Subdivision Outline Maps (1990)**—These State-based maps show the names and boundaries of all counties, county subdivisions, places, and AI/ANA's in each State and statistically equivalent entity for which the Census Bureau tabulates data for the 1990 census. (See fig. 4-12.) Maps are both electrostatically plotted and printed. Page-size, sectionalized versions appear in various reports. Scales vary from State to State. An index map is provided for States that require multiple sheets in the report.

**Census Tract/Block Numbering Area (BNA) Outline Maps (1990)**—These county-based maps depict the boundaries and codes of census tracts and BNA's; the features and feature names underlying the boundaries; and the boundaries and names of counties, county subdivisions, places, and AI/ANA's. (See fig. 4-13.) Map scales vary to minimize the number of sheets. The maps may include one or more inset maps for densely settled areas; in figure 4-13, the shaded section is an area for which there is an inset map. The maps are electrostatically plotted. A printed version will be sold by the GPO in late 1992.

**Voting District Outline Maps (1990)**—These electrostatically plotted maps are available for each county for which State officials submitted boundaries during Phase 2 of the 1990 Census Redistricting Data Program. They depict voting district boundaries, names, and codes; the features and feature names underlying the boundaries; and the boundaries and names of counties, county subdivisions, places, and AI/ANA's. Map scales vary to minimize the number of sheets. The maps may include one or more insets for densely settled areas.

**Regions and Divisions of the United States**—This page-size map of the United States shows the States, regions, and divisions.

Figure 4-13. Census Tract/Block Numbering Area Outline Maps Sample



**Urbanized Area Outline and Urbanized Area Boundary Maps**—The outline maps appear in the reports and show the UA's extent and component entities (States, counties, county subdivisions, places, and AI/ ANA's). Smaller UA's are grouped on one page; larger UA's may require an entire page or multiple pages.

The boundary maps are available in an electrostatic plotter version for each 1990 urbanized area. They show the specific features underlying the UA boundaries and the names of the features, along with the boundaries and names of States, counties, county subdivisions, places, and AI/ ANA's. Scales vary by area.

**American Indian and Alaska Native Areas: 1990**—This two-page map (with insets) shows the locations and names of AI/ ANA's, along with State and county boundaries.

**Congressional District Outline for the 103rd Congress**— One map will be available for each State, showing the CD's drawn on the basis of the results of the 1990 census. Larger scale inset maps show boundary features of CD's in multidistrict counties. A *Congressional District Atlas* will combine the maps in a single publication which will include tables showing the relationship of CD's to counties, places, and county subdivisions (in 12 States).

**State and County Outline Maps**—This page-size, State-based, map series shows State and county boundaries and names.

**State and Metropolitan Area Outline Maps**—This page-size, State-based map series shows county boundaries and names along with the coverage and names of MSA's, CMSA's, and PMSA's, including any portion of an MSA or PMSA that extends into an adjoining State(s). It also identifies the State capital and selected places in each State.

**Metropolitan Areas of the United States**—This two-page map shows the names and coverage of MSA's, CMSA's, and PMSA's for the United States. The map also displays the State boundaries and the county boundaries within MA's.

**Congressional Districts of the 103rd Congress**—This wall-size map of the United States shows boundaries and numbers of reapportioned Congressional districts of the 103rd Congress. State and county boundaries and county names are also shown.

**Thematic Maps**—In addition to the thematic maps included in the printed reports (see fig. 4-10), a number of wall-size (46" x 30") maps displaying various characteristics from the 1990 census are planned for release during 1992-95. The first of this GE-90 map series to be available is *Black Persons as a Percent of Total Population: 1990*. Among the other titles in this series are *Persons of Hispanic Origin as a Percent of Total Population: 1990*; *American Indian,*

Figure 4-14. 1980 Geographic Identification Code Scheme (PHC80-R5)

[Table similar to planned 1990 GICS]

Alphabetic List of Place Names

GEOGRAPHIC CODES				NAME	DESCRIPTIVE CODES						GEOGRAPHIC CODES				NAME	DESCRIPTIVE CODES						
FIPS STATE	FIPS COUNTY	CENSUS MCD	CENSUS PLACE		FIPS PLACE	SIZE	PL. DESC.	SWMA	UNBANKED AREA	TRACTED	BLOCKED	FIPS STATE	FIPS COUNTY	CENSUS MCD		CENSUS PLACE	FIPS PLACE	SIZE	PL. DESC.	SWMA	UNBANKED AREA	TRACTED
40	013	036	0005	Achille town	00100	02	4				40	031	031	0345	Cadde town	10700	05	4				
40	123	006	0010	Ada city (pt.)	00200	08	4				40	013	031	0350	Cadde town	10800	03	4	4200		T	
40	123	031	0010	Ada city (pt.)	00200	08	4				40	013	011	0355	Calera town	10950	04	4				
40	097	003	0015	Adair town	00250	09	4				40	117	006	0357	Calide town	11010	01	4				
40	087	016	0020	Addington town	00450	01	4				40	017	011	0360	Calumet town (pt.)	11050	02	4	5880		T	
40	115	006	0025	Afton town	00600	04	4				40	017	031	0360	Calumet town (pt.)	11050	02	4	5880		T	
40	081	021	0030	Agra town	00700	02	4				40	063	011	0365	Calvin town	11100	02	4				
40	127	016	0035	Albion town	01050	01	4				40	043	021	0370	Camargo town	11150	02	4				
40	121	013	0040	Alberson town	01150	02	4				40	079	011	0375	Camaron town	11300	02	4	2720		T	
40	051	021	0045	Alex town	01250	03	4				40	121	016	0380	Canadian town	11450	02	4				
40	003	006	0050	Aline town	01350	02	4				40	005	016	0385	Caney town	11550	01	4				
40	063	011	0055	Allen town (pt.)	01400	03	4				40	011	006	0390	Canion town	11600	03	4				
40	123	016	0055	Allen town (pt.)	01400	03	4				40	149	016	0385	Canuta town	11850	03	4				
40	065	006	0060	Altus city	01700	10	4				40	151	006	0400	Capron town	11750	01	4				
40	151	006	0065	Alva city	01800	08	4				40	003	006	0405	Carmen town	12000	03	4				
40	051	006	0067	Amber town	01900	02	4				40	015	021	0410	Carnegie town	12050	06	4				
40	083	006	0070	Ames town	01950	02	4				40	081	021	0415	Carney town	12100	03	4				
40	083	021	0075	Amerika town	02000	01	4				40	047	011	0417	Carrier town (pt.)	12200	02	4	2340		T	
40	015	006	0080	Anadarko city	02050	08	4				40	047	032	0417	Carrier town (pt.)	12200	02	4	2340		T	
40	127	006	0085	Antlers town	02250	07	4				40	009	006	0420	Carter town	12300	02	4				
40	015	011	0090	Apache town	02300	05	4				40	073	016	0425	Cashien town (pt.)	12650	03	4				
40	039	011	0095	Arapaho town	02500	09	4				40	083	016	0425	Cashion town (pt.)	12650	03	4				
40	019	006	0100	Ardmore city (pt.)	02600	10	4				40	107	011	0430	Castle town	12750	01	4				
40	019	016	0100	Ardmore city (pt.)	02600	10	4				40	131	006	0435	Catoosa city (pt.)	12900	05	4	8560	8560	T	B
40	079	006	0105	Arizona town	02650	06	4	2720	2720	T	40	131	016	0435	Catoosa city (pt.)	12900	05	4	8560	8560	T	B

Eskimo, and Aleut Population as a Percent of Total Population: 1990; and Asian or Pacific Islander Persons as a Percent of Total Population: 1990.

**GEOGRAPHIC CODE SCHEMES**

Sometimes codes may be more convenient to use than names for geographic entities, especially when processing data for the areas by computer. Geographic code schemes, providing codes and the corresponding names for selected census geographic entities, are found in the Federal Information Processing Standards (FIPS) publications and the Census Bureau's *Geographic Identification Code Scheme (GICS)* described below.

**Federal Information Processing Standards Publications**

Many of the geographic codes included in the Census Bureau's computer tape files are the standard codes used by all Federal agencies. The National Institute of Standards and Technology, U.S. Department of Commerce, publishes these codes in a series known as the Federal Information Processing Standards Publications (FIPS PUB's). Publications for geographic entities listed below are sold by the Commerce Department's National Technical Information Service (NTIS), Springfield, VA 22161. (703-487-4650)

**FIPS PUB 5-2**—Codes for the Identification of the States, the District of Columbia and the Outlying Areas of the

United States, and Associated Areas (hard copy, \$12.50; microfiche, \$9)

**FIPS PUB 6-4**—Counties and Equivalent Entities of the United States, Its Possessions, and Associated Areas (hard copy, \$17; microfiche, \$9)

**FIPS PUB 8-5** —Metropolitan Statistical Areas (Including CMSA's, PMSA's, and NECMA's) (hard copy, \$19; microfiche, \$9)

**FIPS PUB 9-1**—Congressional Districts of the United States. (hard copy, \$12.50; microfiche, \$9)

**FIPS PUB 55DC-4**—Guideline: Codes for Named Populated Places, Primary County Divisions, and Other Locational Entities of the United States and Outlying Areas (hard copy, \$140; magnetic tape, \$590)

**Geographic Identification Code Scheme**

The Geographic Identification Code Scheme (GICS) is a set of tables presenting the names and codes of the high-level legal and statistical entities for which the Census Bureau tabulates data. Geographic codes contained in the GICS correspond to those used in all 1990 census data files, TIGER extract files, and census maps.

The tables are organized by State (including the District of Columbia), Puerto Rico, and the outlying areas. One

table (arranged by counties and statistically equivalent entities within a State) lists counties, county subdivisions, and places, with the appropriate census and/or FIPS codes, as follows: State, county, county subdivision, place, place description, MA, and UA; it also identifies an entity's urban/rural classification, whether it has census tracts or BNA's, and provides its population, housing counts, and land area. Other tables present all the places alphabetically within each State with their corresponding county, county subdivision, and place codes; all the county subdivisions alphabetically in each of 12 States; codes for regions, divisions, States, MA's, UA's, AI/ANA's, and sub-MCD's (in Puerto Rico); and notes regarding changes and corrections since the 1980 census and for the 1990 census. Figure 4-14 illustrates a table from the 1980 GICS.

Most of this information also is available on magnetic tape and CD-ROM as an extract of the TIGER data base, called the TIGER/GICS™ file (discussed earlier), and includes other information such as area measurements, internal points, population density, and population and housing counts.

## ORDERING GEOGRAPHIC PRODUCTS

Information about any geographic product may be obtained by contacting Customer Services, Bureau of the Census, Washington, DC 20233; 301-763-4100; fax, 301-763-4794.

The Census Bureau will announce future geographic products through:

- Articles in *Census and You*
- Comprehensive lists in the *Monthly Product Announcement*

## SUMMARY

Attention to geographic detail is important to all users of 1990 census data from understanding geographic entities and their relationships to selecting the appropriate maps and data to meet individual needs.

The TIGER System is responsible for a significant improvement in map products over those used for the 1980 census. The flexibility of the TIGER System has not only allowed the Census Bureau to produce maps more quickly and at a wider variety of scales, but also has improved their accuracy, timeliness, and readability. With the entire country divided into blocks, data from the 1990 census are reported in greater geographic detail than ever before.

By discussing the various kinds of geographic entities and their hierarchical relationships, the methods of identifying the entities and delineating their boundaries, the different kinds of maps, and the TIGER System, this chapter has examined important geographic concepts and introduced some of the data products described in chapter 5.

# CHAPTER 5. Data Products

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## INTRODUCTION

### Planning the 1990 Census Products

The value of a census depends largely upon the dissemination of its results. For the 1990 Census of Population and Housing, the Census Bureau prepared an array of data products to meet the needs of most users. This chapter describes the 1990 census data products and provides information on how to obtain them.

Planning the 1990 data products began early in the decade. It included these major components:

- Evaluation by Census Bureau staff of the 1980 census products and new dissemination media.
- An examination of Federal legislation to pinpoint requirements for decennial census information, and consultation with other Federal agencies, both directly and through the Federal Agency Council, to identify any other Federal requirements.
- Recommendations from 65 Local Public Meetings, held in State capitals and other major cities, at which the Census Bureau sought advice from the public on planning the 1990 census. The meetings were jointly sponsored with the State Data Centers. Over 5,000 people attended.
- Recommendations received through other conferences, minority organizations, professional organizations, census public advisory committees, correspondence, and so forth. Among the groups providing recommendations were the National Urban League, National Council of La Raza, Population Association of America, State Data Center Steering Committee, Association of Public Data Users, American Statistical Association, and Council of Professional Associations on Federal Statistics.
- Recommendations from data users at 10 regional 1990 Census Product Meetings regarding data product plans developed based on the Local Public Meetings and

other sources. Later, the Census Bureau held a National Conference on Data Products to refine the proposals discussed at the regional meetings.

Census Bureau staff continued to consult with data users to work out details of product design following the national conference. For example, articles in *Census and You*, the Census Bureau's monthly newsletter, invited persons interested in commenting on publication and summary tape file plans to review preliminary specifications. Also, the Association of Public Data Users established a working group to review the specifications. Suggestions reviewers furnished were considered carefully, and, in many instances, the Census Bureau modified its product plans.

### Media for Data Products

Printed reports, microfiche, and computer tape are important means for distributing 1990 census data. Newer media are used as well: some data files on tape also are being offered on CD-ROM's (compact disc—read-only memory, a type of laser disc), and selected data are accessible online on CENDATA™, the Census Bureau's online system. In addition, the Census Bureau offers printouts of data from Public Law (P.L.) 94-171 Data Files and paperprints ("blowbacks") from microfiche. It uses press releases and similar fliers to get key data for large areas out quickly. The Census Bureau is offering on diskette only the 1990 census files for the Virgin Islands of the United States and the Pacific Outlying Areas. The limited storage capacity of diskettes ("floppies") make them unsuitable for large data files.

Following are brief descriptions of the product media; more detailed information appears later in this chapter.

**Printed Publications**—Since the first census in 1790, printed reports have been the most widely available source of census data. They provide basic data and, in recent censuses, outline maps for many geographic areas. Most 1990 census reports are similar in geographic coverage and data content to those of the 1980 census.

For the P.L. 94-171 Data Files and certain other files, the Census Bureau offers paper listings generated from computer tape. They present the data in a tabular format. Paperprints also can be prepared from microfiche (discussed below). Also, press releases offer selected data from many 1990 census products.

**Computer Tape**—The Census Bureau has offered data on computer tape since the 1960's. For the 1990 census, it offers the tape on reels and cartridges.

**SCHEDULE of the whole number of PERSONS within the several Districts of the United States, taken according to "An Act providing for the Enumeration of the Inhabitants of the United States," passed March the 1st, 1790.**

DISTRICTS.	Free white Males of sixteen years & upwards including heads of families.	Free white Males under sixteen years.	Free white Females including heads of families.	All other free persons.	Slaves.	Total.
Vermont	22,435	22,328	40,505	255	16	85,539
New Hampshire	36,085	34,851	70,160	630	158	141,885
Maine	24,384	24,748	46,870	538	-	96,540
Massachusetts	95,453	87,289	190,582	5,463	-	578,787
Rhode Island	16,019	15,799	32,652	3,407	948	68,825
Connecticut	60,523	54,403	117,448	2,808	2,764	237,946
New York	83,700	78,122	152,320	4,654	21,324	540,120
New Jersey	45,251	41,416	83,287	2,762	11,423	184,139
Pennsylvania	110,788	106,948	206,363	6,537	3,737	434,373
Delaware	11,783	12,143	24,384	3,899	8,887	50,094
Maryland	55,915	51,339	101,395	8,043	103,036	319,728
Virginia	110,936	116,135	215,045	12,866	292,627	747,610
Kentucky	15,154	17,057	28,922	114	12,430	73,677
North Carolina	69,988	77,506	140,710	4,975	100,372	393,751
South Carolina	35,576	37,722	66,880	1,801	107,094	240,073
Georgia	13,103	14,044	25,739	398	29,264	82,548
Total.						3,893,635

	Free white males of twenty-one years and upwards, including heads of families.	Free males under twenty-one years of age.	Free white females, including heads of families.	All other persons.	Slaves.	Total.
S. West. Territory	6,271	10,277	15,365	361	3,417	35,691
N. Do.	-	-	-	-	-	-

Truly stated from the original returns deposited in the office of the Secretary of State.

TH: JEFFERSON.

October 24th, 1791.

\* This return was not signed by the marshal, but was enclosed and referred to in a letter written and signed by him.

Summary page from the first census report

Two types of data are on tape: summary statistics and microdata. Summary tape files offer statistics (data that are summed or totaled to various levels of geography) such as figures in printed reports. Public-use microdata files present population and housing characteristics from a sample of individual census records from which identifying information has been removed. They permit users to design and prepare their own tabulations.

**Microfiche**—Microform products (microfilm and microfiche) have been issued from several censuses. The Census Bureau began using microfiche, instead of microfilm, for disseminating decennial census results for the 1980 census. Microfiche is a fairly inexpensive way to provide a great deal of data.

Microfiche provides the data shown on selected 1990 census summary tape files. The printed reports are available on microfiche from the Census Bureau soon after the reports are published. The Census Bureau also offers paperprints, similar to photocopies, made from the microfiche.

**CD-ROM's**—These laser discs have a large storage capacity, making them well suited for census data files. One 4 3/4-inch CD-ROM can hold the contents of 1,600 diskettes or 4 high-density tape reels. CD-ROM's can be used, with a suitable reader, in conjunction with many personal computers and larger machines. For the 1990 census, the Census Bureau offers these files on CD-ROM: the P.L. 94-171 Data File; Summary Tape Files (STF's) 1A, 1B (extract), 1C, 3A, 3B, and 3C; 1990 Census/EEO File; County-to-County Migration File; Public Use Microdata; and subject summary tape files.

**Online Information System**—The Census Bureau began its own online information system, called CENDATA™, in 1984. CENDATA™ offers a number of Census Bureau reports, in whole or in part, online. It provides up-to-date information about the availability of data products and carries selections of data from the P.L. 94-171 Data File and STF's 1 and 3 for various geographic areas. CENDATA™ is available through two vendors, CompuServe and DIALOG.

The information on product availability is particularly important because most census products are issued on a flow basis, State-by-State, as the processing of each State's data is finished. That means the data released today for one State may not be available for another State for several weeks. CENDATA™ alerts users about the availability of specific products and provides ordering information. (There are other sources for this information, such as the *Daily List* and *Monthly Product Announcement*. See the "Guidelines for Obtaining Data Products" section at the end of this chapter.)

**Maps**—Users generally need maps showing area boundaries to use census data effectively. See chapter 4 for a discussion of maps and how to obtain them.

**Selecting the Right Product Medium**

Users of Census Bureau data should consider a number of factors in deciding the most suitable product medium among those presenting the data and geographic detail they need.

- Ease of access may be essential. Printed reports generally are the most widely available source of census data. Also, except for census tracts/block numbering area (BNA) reports, the reports include maps of the

areas reported. For tract/BNA reports and other products, users generally need to purchase maps separately from the Census Bureau or the Government Printing Office.

- For ease of access and reduced storage space, microfiche may be the best choice. However, microfiche are not issued until after the comparable products (printed reports or computer tape) have been issued.
- Suitability for extensive use may be important. A user of large amounts of 1990 census data may find working with data on computer tape or CD-ROM to be the most efficient approach because large quantities of data can be processed and analyzed quickly. These products generally offer more detailed data than either printed reports or microfiche.
- Timing could be crucial. If so, users should note that data are available on computer tape first. Selected data from some files are available quickly through CEN-DATA™ as well.

Selecting the best approach can be complicated. Reports and microfiche are less expensive than computer tapes and CD-ROM's, but they may include less data. Printed reports require no special equipment to use, in contrast to other products. Working with computer files may be expensive, but doing comparable work by hand using the reports or microfiche also may be expensive—as well as more time-consuming and error-prone.

These and other factors will be discussed further in the following sections to help data users choose the best delivery media and data products for their purposes.

Also, knowing the following basic principles about the availability of data for various geographic entities included in the 1990 census can save time and trouble in using the data and help avoid misinterpretation.

- As a general rule, the higher an entity is in the geographic hierarchy, the greater the number of published data tables and the amount of detail the Census Bureau provides for it. (See ch. 4 for information on the geographic hierarchy.)
- More data are available in a computer-readable form than appear in print, especially for geographic entities below the State level.
- Sample data for geographic entities containing relatively few people are more subject to certain kinds of statistical error than are similar data for geographic entities containing larger numbers of people. (See ch. 6.)
- Boundary changes from one census to another will affect historical comparisons.

## Protecting Confidential Information

The Census Bureau releases no data that violate the confidentiality of individual information. The Census Bureau edits the files to avoid revealing information that could identify individuals, households, or housing units. (For procedures used to assure data confidentiality, see ch. 6.)

## Major Developments and Changes in the 1990 Census Data Products

- STF's include area measurements and geographic coordinates (for an "internal point") on most records. The files contain summary records for geographic entities that are split by higher-level geography in addition to the data for each part.
- The 1980 Neighborhood Statistics Program has been expanded to become the User-Defined Areas Program (UDAP) for the 1990 census. UDAP provides data, paid for by the requester, for geographic areas defined by the requester.
- Early reports and computer tape files present more data than did early 1980 census products.
- Extensive data are available on CD-ROM's.
- Data summaries for American Indian and Alaska Native areas, metropolitan areas, and urbanized areas are included in separate U.S. summary products or in compendia reports for such areas.
- Historic data are limited to population and housing unit counts. These data and notes on geographic area changes appear only in the 1990 CPH-2 report series.
- Several 1980 data products are not being produced for the 1990 census. These include the following:
  1. STF 5 and its associated report series, *Detailed Population Characteristics and Metropolitan Housing Characteristics*. These products contained very detailed cross-tabulations for large geographic entities such as States and metropolitan areas. Most data users found STF 5 too large and detailed for their needs. The Census Bureau is including the most widely used data from these products in 1990 census subject reports and subject STF's.
  2. The report series, *Preliminary Population and Housing Unit Counts and Advance Final Population and Housing Unit Counts*, as well as the report, *Provisional Estimates of Social, Economic, and Housing Characteristics*.
  3. The 1-percent public use microdata sample (PUMS) for selected urbanized areas, other large areas, and urban and rural components for large States and groups of smaller States. (The 1-percent PUMS for metropolitan and nonmetropolitan areas will be produced.)

## REPORT SERIES

### Introduction

Reports presenting data from the 1990 census are issued in several series, some paralleling the 1980 series. The 1990 report series, in print and on microfiche, are

Figure 5-1. 1990 Census Printed Reports

Series	Title	Report(s) issued for	Description	Geographic areas	Comparable 1980 series
<b>1990 CENSUS OF POPULATION AND HOUSING (1990 CPH)</b>					
<b>100-Percent Data</b>					
1990 CPH-1	<b>Summary Population and Housing Characteristics</b>	U.S., States, DC, Puerto Rico, and U.S. Virgin Islands	Population and housing unit counts, and summary statistics on age, sex, race, Hispanic origin, household relationship, units in structure, value and rent, number of rooms, tenure, and vacancy characteristics	Local governmental units (i.e., counties, places, and towns and townships), other county subdivisions, and American Indian and Alaska Native areas	PHC80-3 Summary Characteristics for Governmental Units and Standard Metropolitan Statistical Areas (100-percent portion)
1990 CPH-2	<b>Population and Housing Unit Counts</b>	U.S., States, DC, Puerto Rico, and U.S. Virgin Islands	Total population and housing unit counts for 1990 and previous censuses	States, counties, county subdivisions, places, State component parts of metropolitan areas (MA's) and urbanized areas (UA's), and summary geographic areas (for example, urban and rural)	PC80-1-A, Number of Inhabitants
<b>100-Percent and Sample Data</b>					
1990 CPH-3	<b>Population and Housing Characteristics for Census Tracts and Block Numbering Areas</b>	MA's, and the nonmetropolitan balance of each State, Puerto Rico, and U.S. Virgin Islands	Statistics on 100-percent and sample population and housing subjects	In MA's: census tracts/block numbering areas (BNA's), places of 10,000 or more inhabitants, and counties. In the remainder of each State: census tracts/BNA's, places of 10,000 or more, and counties	PHC80-2, Census Tracts
1990 CPH-4	<b>Population and Housing Characteristics for Congressional Districts of the 103rd Congress</b>	States and DC	Statistics on 100-percent and sample population and housing subjects	Congressional districts (CD's) and, within CD's, counties, places of 10,000 or more inhabitants, county subdivisions of 10,000 or more inhabitants in selected States, and American Indian and Alaska Native areas	PHC80-4, Congressional Districts of the 98th Congress
<b>Sample Data</b>					
1990 CPH-5	<b>Summary Social, Economic, and Housing Characteristics</b>	U.S., States, DC, Puerto Rico, and U.S. Virgin Islands	Statistics generally on sample population and housing subjects	Local governmental units (i.e., counties, places, and towns and townships), other county subdivisions, and American Indian and Alaska Native areas	PHC80-3, Summary Characteristics for Governmental Units and Standard Metropolitan Statistical Areas (sample portion)
<b>100-Percent and Sample Data*</b>					
1990 CPH-6	<b>Social, Economic, and Housing Characteristics</b>	American Samoa, Guam, Northern Mariana Islands, and Palau	Detailed statistics on population and housing subjects	American Samoa, district, island, county, village Guam, election district, place Northern Mariana Islands, municipality, municipal district, place Palau, State, municipality, place	Various series

\* Data collected on a sample basis in the United States were collected on a 100-percent basis in these areas.

Figure 5-1. 1990 Census Printed Reports—Con.

Series	Title	Report(s) issued for	Description	Geographic areas	Comparable 1980 series
<b>1990 CENSUS OF POPULATION (1990 CP)</b>					
<b>100-Percent Data</b>					
1990 CP-1	<b>General Population Characteristics</b>	U.S., States, DC, Puerto Rico, and U.S. Virgin Islands	Detailed statistics on age, sex, race, Hispanic origin, marital status, and household relationship characteristics	States, counties, places of 1,000 or more inhabitants, county subdivisions of 1,000 or more inhabitants in selected States, State parts of American Indian areas, Alaska Native areas, and summary geographic areas such as urban and rural	PC80-1-B, same title
1990 CP-1-1A	<b>General Population Characteristics for American Indian and Alaska Native Areas</b>	U.S.	Detailed statistics on age, sex, race, Hispanic origin, marital status, and household relationship characteristics	American Indian and Alaska Native areas; i.e., American Indian reservations, off-reservation trust lands, tribal jurisdiction statistical areas (Oklahoma), tribal designated statistical areas, Alaska Native village statistical areas, and Alaska Native Regional Corporations	None (PC80-1-B comparable in part)
1990 CP-1-1B	<b>General Population Characteristics for Metropolitan Areas</b>	U.S.	Detailed statistics on age, sex, race, Hispanic origin, marital status, and household relationship characteristics	Individual MA's. For MA's split by State boundaries, summaries are provided both for the parts and for the whole MA	None (PC80-1-B comparable in part)
1990 CP-1-1C	<b>General Population Characteristics for Urbanized Areas</b>	U.S.	Detailed statistics on age, sex, race, Hispanic origin, marital status, and household relationship characteristics	Individual UA's. For UA's split by State boundaries, summaries are provided both for the parts and for the whole UA	None (PC80-1-B comparable in part)
<b>Sample Data</b>					
1990 CP-2	<b>Social and Economic Characteristics</b>	U.S., States, DC, Puerto Rico, and U.S. Virgin Islands	Statistics generally on sample population subjects	States (including summaries such as urban and rural), counties, places of 2,500 or more inhabitants, county subdivisions of 2,500 or more inhabitants in selected States, Alaska Native areas, and the State portion of American Indian areas	PC80-1-C, General Social and Economic Characteristics
1990 CP-2-1A	<b>Social and Economic Characteristics for American Indian and Alaska Native Areas</b>	U.S.	Statistics generally on sample population subjects	American Indian and Alaska Native areas, as for CP-1-1A	None (PC80-1-C comparable in part)

Figure 5-1. 1990 Census Printed Reports—Con.

Series	Title	Report(s) issued for	Description	Geographic areas	Comparable 1980 series
<b>1990 CENSUS OF POPULATION (1990 CP)—Con.</b>					
<b>100-Percent Data—Con.</b>					
1990 CP-2-1B	<b>Social and Economic Characteristics for Metropolitan Areas</b>	U.S.	Statistics generally on sample population subjects	Individual MA's, as for CP-1-1B	None (PC80-1-C comparable in part)
1990 CP-2-1C	<b>Social and Economic Characteristics for Urbanized Areas</b>	U.S.	Statistics generally on sample population subjects	Individual UA's, as for CP-1-1C	None (PC80-1-C comparable in part)
1990 CP-3	<b>Population Subject Reports</b>	Selected subjects	Approximately 30 reports on population census subjects such as migration, education, income, the older population, and racial and ethnic groups	Generally limited to the U.S., regions, and divisions; for some reports, other highly populated areas such as States, MA's, counties, and large places	PC80-2, same title
<b>1990 CENSUS OF HOUSING (1990 CH)</b>					
<b>100-Percent Data</b>					
1990 CH-1	<b>General Housing Characteristics</b>	U.S., States, DC, Puerto Rico, and U.S. Virgin Islands	Detailed statistics on units in structure, value and rent, number of rooms, tenure, and vacancy characteristics	States, counties, places of 1,000 or more inhabitants, county subdivisions of 1,000 or more inhabitants in selected States, State parts of American Indian areas, Alaska Native areas, and summary geographic areas such as urban and rural	HC80-1-A, same title
1990 CH-1-1A	<b>General Housing Characteristics for American Indian and Alaska Native Areas</b>	U.S.	Detailed statistics on units in structure, value and rent, number of rooms, tenure, and vacancy characteristics	American Indian and Alaska Native areas; i.e., American Indian reservations, trust lands, tribal jurisdiction statistical areas (Oklahoma), tribal designated statistical areas, Alaska Native village statistical areas, and Alaska Native Regional Corporations	None (HC80-1-A comparable in part)
1990 CH-1-1B	<b>General Housing Characteristics for Metropolitan Areas</b>	U.S.	Detailed statistics on units in structure, value and rent, number of rooms, tenure, and vacancy characteristics	Individual MA's. For MA's split by State boundaries, summaries are provided both for the parts and for the whole MA	None (HC80-1-A comparable in part)
1990 CH-1-1C	<b>General Housing Characteristics for Urbanized Areas</b>	U.S.	Detailed statistics on units in structure, value and rent, number of rooms, tenure, and vacancy characteristics	Individual UA's. For UA's split by State boundaries, summaries are provided both for the parts and for the whole UA	None (HC80-1-A comparable in part)

Figure 5-1. 1990 Census Printed Reports—Con.

Series	Title	Report(s) issued for	Description	Geographic areas	Comparable 1980 series
<b>1990 CENSUS OF HOUSING (1990 CH)—Con. Sample Data</b>					
1990 CH-2	<b>Detailed Housing Characteristics</b>	U.S., States, DC, Puerto Rico, and U.S. Virgin Islands	Statistics generally on sample housing subjects	States (including summaries such as urban and rural), counties, places of 2,500 or more inhabitants, county subdivisions of 2,500 or more inhabitants in selected States, Alaska Native areas, and State parts of American Indian areas	HC80-1-B, same title
1990 CH-2-1A	<b>Detailed Housing Characteristics for American Indian and Alaska Native Areas</b>	U.S.	Statistics generally on sample housing subjects	American Indian and Alaska Native areas, as in 1990 CH-1-1A	None (HC80-1-B comparable in part)
1990 CH-2-1B	<b>Detailed Housing Characteristics for Metropolitan Areas</b>	U.S.	Statistics generally on sample housing subjects	Individual MA's, as in 1990 CH-1-1B	None (HC80-1-B comparable in part)
1990 CH-2-1C	<b>Detailed Housing Characteristics for Urbanized Areas</b>	U.S.	Statistics generally on sample housing subjects	Individual UA's, as in 1990 CH-1-1C	None (HC80-1-B comparable in part)
1990 CH-3	<b>Housing Subject Reports</b>	Selected subjects	Approximately 10 reports on housing census subjects such as structural characteristics and space utilization	Generally limited to U.S., regions, and divisions; for some reports, other highly populated areas such as States, MA's, counties, and large places	HC80-3, same title

organized into three major groups according to subject matter. The 1990 Census of Population—1990 CP—reports present results from population questions (for example, age, sex, race, Hispanic origin, commuting, and employment). The 1990 Census of Housing—1990 CH—reports focus on housing (for example, rent, value, fuels, plumbing facilities, and the number of rooms). The 1990 Census of Population and Housing—1990 CPH—reports present both population and housing data.

Generally, the published reports present either 100-percent tabulations (based on responses to the 100-percent questions from both short forms and long forms) or sample estimates (based on responses to the 100-percent and sample questions on the long forms only). Two report series (1990 CPH-3 and -4) have some tables with 100-percent figures and other tables with sample estimates. The relative ease of processing 100-percent data allows the Census Bureau to prepare the 100-percent tables for the

CPH-3 and -4 reports months before the sample tables. The Census Bureau's Customer Services sells photocopies of the 100-percent tables for the CPH-3 reports for census tracts/ BNA's as soon as they are ready.

Figure 5-1 lists the 1990 report series, excluding "supplemental" reports discussed below, and notes the comparable 1980 reports. The entry for each 1990 series presents key information, such as the types of geographic entities covered and the nature of the data included. Reports in series for States or metropolitan areas, such as 1990 CP-1 or 1990 CPH-3, are issued as they are produced. Several series may be at various stages of release at the same time.

### Printed Reports

The main body of each report is a series of statistical tables. Figure 5-2 shows a typical example. Each report

also includes a general introduction to the census and appendixes, such as ones that define the geographic and subject matter terms used in the report. The data are organized so that many users will find the figures they need in just one or two of the hundreds of reports produced from the 1990 census. Decennial census reports generally do not analyze the data or discuss their potential applications.

Within most series, reports are organized geographically. Several series consist of 54 reports—1 for each State, the District of Columbia, Puerto Rico, the Virgin Islands of the United States, and a U.S. summary. The State reports generally contain data for the State and substate geographic entities, such as counties, county subdivisions, and places. (Fig. 5-3 identifies in greater detail what types of entities within the United States are included in selected report series.) The U.S. summary report in each series generally has data for the United States, census regions and divisions, and States and may contain selected data for smaller entities.

The Census Bureau also publishes data for the Pacific Outlying Areas. The data appear in the report series *Social, Economic, and Housing Characteristics* (1990 CPH-6) which includes a separate publication for each area—American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the Republic of Palau.

Tabulations for metropolitan areas, urbanized areas, and American Indian and Alaska Native areas are sometimes published in separate volumes in conjunction with these series. For example, see the reports 1990 CP-1-1A,

1B, and 1C in figure 5-1. Having such separate volumes is new for the 1990 census. The Census Bureau adopted this approach because many of these entities have components in more than one State; experience has shown that including them in State reports delays the reports.

By contrast, “subject reports” usually cover the entire Nation and are differentiated by the highly specific subject matter they treat. The Census Bureau plans to publish a variety of population and housing subject reports offering detailed data primarily at the national level.

The Census Bureau also issues “supplementary” reports presenting special compilations of census data dealing with specific population and housing subjects and subgroups of the population. Three examples of supplementary reports for the 1990 census are *Advance Estimates of Social, Economic, and Housing Characteristics; Social, Economic, and Housing Characteristics for Redefined Metropolitan Areas* (following the Office of Management and Budget’s announcement of the redefinition of metropolitan areas in the summer of 1992 based on 1990 census data); and *Detailed Occupation and Other Characteristics From the Equal Employment Opportunity File for the United States*. A series of “1990 Census Profiles,” generally focusing on national population trends, is being published, as are a series (1990 CQC) highlighting results of specific census questions and a series (1990 CH-S-1) of “1990 Census Housing Highlights” with issues for the United States, States, the District of Columbia, Puerto Rico, and the Virgin Islands of the United States. The Census Bureau

Figure 5-2. Table from 1990 CPH-1-30, *Summary Population and Housing Characteristics, Nevada*

Table 5. **Household, Family, and Group Quarters Characteristics: 1990**

[For definitions of terms and meanings of symbols, see text]

State County County Subdivision Place	Persons in households		Family households			Nonfamily households				Persons per—		Persons in group quarters		
			Total	Married-couple family	Female householder, no husband present	Householder living alone			Household	Family	Total	Insti-tutionalized persons	Other per-sons in group quarters	
						Total	65 years and over							
							Total	Female						
<b>The State</b> .....	<b>1 177 633</b>	<b>466 297</b>	<b>307 400</b>	<b>239 573</b>	<b>47 509</b>	<b>158 897</b>	<b>119 627</b>	<b>33 244</b>	<b>21 983</b>	<b>2.53</b>	<b>3.06</b>	<b>24 200</b>	<b>13 550</b>	<b>10 650</b>
Churchill County .....	17 470	6 666	4 791	4 048	525	1 875	1 535	656	470	2.62	3.11	468	151	317
Carson Sink division .....	11	5	4	4	—	1	1	—	—	2.20	2.50	—	—	—
Dixie Valley division .....	167	66	44	38	1	22	20	9	4	2.53	3.11	—	—	—
Fallon division .....	17 292	6 595	4 743	4 006	524	1 852	1 514	647	466	2.62	3.11	468	151	317
Fallon city .....	6 258	2 620	1 670	1 322	278	950	792	348	277	2.39	2.99	180	139	41
Fallon Station CDP .....	859	239	238	227	7	1	—	—	—	3.59	3.59	233	—	233
Clark County .....	729 567	287 025	188 729	143 559	32 046	98 296	73 115	19 264	12 429	2.54	3.08	11 892	6 688	5 204
Clark division .....	23 248	8 511	6 179	5 192	678	2 332	1 664	486	271	2.73	3.17	2 624	2 038	586
Boulder City city (pt.) .....	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enterprise CDP (pt.) .....	827	310	234	211	15	76	64	10	6	2.67	3.10	—	—	—
Henderson city (pt.) .....	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Indian Springs CDP .....	1 131	417	318	258	41	99	80	21	9	2.71	3.13	33	—	33
Las Vegas city (pt.) .....	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Laughlin CDP .....	4 649	1 925	1 234	954	184	691	394	57	32	2.42	2.77	142	—	142
Mesquite city .....	1 848	596	421	345	50	175	135	49	31	3.10	3.74	23	—	23
Moapa Valley CDP .....	3 444	1 127	902	824	57	225	206	119	82	3.06	3.51	—	—	—
North Las Vegas city (pt.) .....	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sunrise Manor CDP (pt.) .....	4 451	1 523	1 251	1 001	193	272	157	19	13	2.92	3.13	—	—	—
Las Vegas division .....	706 319	278 514	182 550	138 367	31 368	95 964	71 451	18 778	12 158	2.54	3.07	9 268	4 650	4 618
Boulder City city (pt.) .....	12 260	4 998	3 712	3 225	347	1 286	1 085	574	408	2.45	2.84	307	204	103
East Las Vegas CDP .....	11 066	4 367	2 980	2 220	550	1 387	1 074	238	144	2.53	3.01	21	4	17
Enterprise CDP (pt.) .....	5 580	2 024	1 432	1 203	139	592	390	108	66	2.76	3.19	5	5	—
Henderson city (pt.) .....	64 315	23 237	17 339	14 196	2 265	5 898	4 183	1 017	739	2.77	3.17	627	344	283
Las Vegas city (pt.) .....	254 193	99 735	64 819	48 080	11 951	34 916	26 142	7 355	4 650	2.55	3.10	4 102	3 121	981
Nellis AFB CDP .....	7 064	1 905	1 754	1 569	109	151	111	2	—	3.71	3.84	1 313	80	1 233
North Las Vegas city (pt.) .....	47 075	14 525	11 121	6 764	3 370	3 404	2 486	709	447	3.24	3.64	632	489	143
Paradise CDP .....	123 516	56 731	30 989	23 236	5 203	25 742	19 394	4 258	2 681	2.18	2.81	1 166	107	1 059
Spring Valley CDP .....	51 689	20 282	14 041	11 411	1 834	6 241	4 328	786	589	2.55	3.00	37	31	6
Sunrise Valley CDP (pt.) .....	90 240	33 343	22 224	18 703	2 224	9 137	6 587	1 975	1 324	2.71	3.11	571	89	482
Enterprise CDP .....	—	11 343	—	4 304	—	5 411	—	1 506	—	2.02	—	445	—	273

also is issuing thematic maps portraying selected 1990 census data. (See ch. 4.) Results from a mid-1991 residential finance survey, part of the decennial census program, will be presented in a report titled *Residential Finance*, scheduled for late 1993.

The Census Bureau also has issued an *Alphabetical Index of Industries and Occupations* (1990 CPH-R-3) and a *Classified Index of Industries and Occupations* (1990 CPH-R-4). The *1990 Census of Population and Housing History* (1990 CPH-R-2), a detailed procedural history of the census, is being prepared.

### Reports on Microfiche

Each 1990 printed report is available on microfiche from Customer Services about 2 months after the report is printed. Microfiche are card-shaped pieces of film, approximately 4 by 6 inches, that contain small-scale page images arrayed in rows and columns. Each microfiche has a title or heading across the top that can be read without magnification. Negative page images are reduced to 1/24 their normal size ("24x"). One fiche contains up to 98 frames arranged in 7 rows and 14 columns.

A later section of this chapter, titled "Microfiche From Selected Summary Tape Files," specifies 1990 data files being offered on microfiche.

Figure 5-3. Areas Summarized in Selected 1990 Census Reports

	1990 CPH-					1990 CP-		1990 CH-	
	1	2	3	4	5	1	2	1	2
United States, regions, divisions . . . .	X	X			X	X	X	X	X
States and statistical equivalents . . .	X	X		X	X	X	X	X	X
Metropolitan areas . . . . .	X	X	X		X	<sup>1</sup> X	<sup>2</sup> X	<sup>3</sup> X	<sup>4</sup> X
Urbanized areas . . . . .	X	X			X	<sup>5</sup> X	<sup>6</sup> X	<sup>7</sup> X	<sup>8</sup> X
Counties and statistical equivalents .	X	X	X	X	X	X	X	X	X
American Indian and Alaska Native areas . . . . .	X			X	X	<sup>9</sup> X	<sup>10</sup> X	<sup>11</sup> X	<sup>12</sup> X
Congressional districts <sup>13</sup> . . . . .				X					
Places (by population size)									
Under 1,000 . . . . .	X	X			X				
1,000 and over . . . . .	X	X			X	X		X	
2,500 and over . . . . .	X	X			X	X	X	X	X
10,000 and over . . . . .	X	X	X	X	X	X	X	X	X
County subdivisions (by type)									
MCD's in 12 States <sup>14</sup> . . . . .	X	X		X	X	X	X	X	X
MCD's in 8 States <sup>15</sup> . . . . .	X	X			X	X		X	
Subdivisions in other States and statistical equivalents <sup>16</sup> . . . . .	X	X			X	X		X	
County subdivisions (by population size)									
MCD's									
Under 1,000 . . . . .	X	X			X	X		X	
1,000 and over . . . . .	X	X			X	X		X	
2,500 and over . . . . .	X	X			X	X	<sup>14</sup> X	X	<sup>14</sup> X
10,000 and over . . . . .	X	X		<sup>14</sup> X	X	X	<sup>14</sup> X	X	<sup>14</sup> X
CCD's . . . . .	X	X			X	X		X	
Census tracts/ BNA's . . . . .			X						

<sup>1</sup>1990 CP-1-1B.

<sup>2</sup>1990 CP-2-1B.

<sup>3</sup>1990 CH-1-1B.

<sup>4</sup>1990 CH-2-1B.

<sup>5</sup>1990 CP-1-1C.

<sup>6</sup>1990 CP-2-1C.

<sup>7</sup>1990 CH-1-1C.

<sup>8</sup>1990 CH-2-1C.

<sup>9</sup>1990 CP-1-1A.

<sup>10</sup>1990 CP-2-1A.

<sup>11</sup>1990 CH-1-1A.

<sup>12</sup>1990 CH-2-1A.

<sup>13</sup>Districts of the 103rd Congress.

<sup>14</sup>Connecticut, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Wisconsin.

<sup>15</sup>Illinois, Indiana, Kansas, Missouri, Nebraska, North Dakota, Ohio, and South Dakota.

<sup>16</sup>MCD's: Arkansas, Iowa, Louisiana, Maryland, Mississippi, North Carolina, Virginia and West Virginia; also Puerto Rico, American Samoa, and Palau. CCD's: Alabama, Arizona, California, Colorado, Delaware, Florida, Georgia, Hawaii, Idaho, Kentucky, Montana, Nevada, New Mexico, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Utah, Washington, and Wyoming. Census subareas: Alaska. Census subdistricts: U.S. Virgin Islands. Guam and the District of Columbia have no county subdivisions or statistical equivalents.

## DATA FILES FOR COMPUTER

### Introduction

Many users will choose to use 1990 census data in computerized form for such reasons as:

- The need to work with a large amount of data. Extensive calculations, sorting, and reformatting can be done more efficiently by computer.
- An interest in using computerized statistical packages or graphic display systems to which the data must be input in machine-readable form.
- The need for data available only in machine-readable data files produced and sold by the Census Bureau. Given the high costs of printing, the Census Bureau can print only a fraction of the machine-readable data.

Users lacking computers but in need of data in computer files often can arrange to have the data they need prepared by State Data Centers or other organizations discussed in chapter 7. These organizations offer such services as generating printouts, preparing analytical reports, and downloading file extracts to diskette.

Computer tape, on reels or cartridges, offers the most extensive selection of census data files. As noted earlier, there are other machine-readable products, new for the 1990 census. These are CD-ROM's, which present the most widely used of the data files found on tape, and online data access through CENDATA™, which offers excerpts from selected files. The following discussion and charts generally concern tape and CD-ROM files; CENDATA™ will be noted when appropriate. For information on the technical characteristics of these machine-readable products, see the discussion of tape and CD-ROM conventions in the "Summary Tape Files" section, below.

The following material deals with 1990 summary data files and microdata files. Later sections of this chapter describe microfiche with data from selected summary files, special tabulations of summary data and microdata, and other data resources.

### Summary Data Files

The Census Bureau is offering an extensive amount of 1990 summary data in machine-readable files. These summary data resemble the summary data in the published reports—numbers of persons, families, or housing units by their various characteristics—but the data often are more detailed and cover more geographic areas.

The P.L. 94-171 Data File is the first summary file prepared from the census. As described below, it furnishes a limited set of data designed for State legislative redistricting.

The Census Bureau releases most summary data in four summarized "files" referred to as Summary Tape Files (STF's) 1 through 4. Some special-purpose summary files also appear on tape.

The following sections describe the P.L. 94-171 Data File, STF's 1 through 4, and special-purpose files. They also furnish information about technical documentation and software.

#### Public Law (P.L.) 94-171 Data File

In December 1975, Congress passed P.L. 94-171. It specifies that within 1 year after Census Day, the Census Bureau must send all State legislatures and Governors the data they need to redefine districts for the State legislature. State officials may, of course, use the same data to delineate revised districts for the U.S. House of Representatives.

To be responsive to P.L. 94-171, the Census Bureau established a voluntary program for those States that wished to receive population tabulations for voting districts or comparable geographic entities. (They were called "election precincts" for the 1980 census.) The Census Bureau would furnish data for these entities, along with the data for blocks, block groups, census tracts/block numbering areas, places, and other entities that all States would receive in the P.L. 94-171 file.

Under this program, those responsible for the legislative redistricting of each State identified the special geographic areas for which they wanted the tabulations and submitted the information to the Census Bureau at the request of the U.S. Secretary of Commerce. Forty-six States and the District of Columbia participated in this program.

In 1985-1986, State officials were given the opportunity to review preliminary large-scale maps for the 1990 census and suggest visible features to be used as block boundaries. In 1989, the Census Bureau sent each State a set of maps showing the numbers assigned by the Census Bureau to the census blocks.

The State officials drew boundaries around groups of blocks that coincided with or approximated the boundaries of voting districts in all or portions of a State and noted the codes for the districts. They submitted the annotated maps, together with a list of the voting district codes and names, to the appropriate Census Bureau regional office for inclusion in the Topologically Integrated Geographic Encoding and Referencing (TIGER) File (see ch. 4).

During 1989 and 1990, the Census Bureau, in cooperation with the National Conference of State Legislatures, conducted a series of regional workshops to brief State officials on the 1988 dress rehearsal P.L. 94-171 data, redistricting case law, census geographic and subject matter terminology, and other redistricting information.

The P.L. 94-171 Data Files were issued State by State, with the files for the last States becoming available ahead of schedule, in mid-March 1991. While designed to meet the needs of legislative redistricting, the data presented are of value for many other uses as well.

The file presents data for these entities: State (including the District of Columbia), American Indian and Alaska Native areas, county, voting district (for participating States),

**Figure 5-4. Illustration of P.L. 94-171 Table on CENDATA™**

1990 Population by Race and Hispanic Origin and Housing Unit Count:

Rantoul village, Illinois

	Total	18 years and over
Population.....	17,212	—
Race:		
White .....	14,065	10,166
Black .....	2,018	1,170
American Indian, Eskimo, or Aleut .....	73	59
Asian or Pacific Islander .....	418	279
Other race.....	638	551
Hispanic Origin (of any race).....	863	682
Not of Hispanic origin:		
White .....	13,865	10,049
Black .....	1,991	1,156
American Indian, Eskimo, or Aleut .....	68	55
Asian or Pacific Islander .....	407	276
Other race.....	18	7
Housing units .....	6,059	NA

NA = Not applicable.

county subdivision, place, census tract/block numbering area, block group, and block. For each entity, the file reports 12 data items for the total population and 11 for the population 18 years old and over (see fig. 5-4), and a housing unit count, land and water area measurements, and latitude and longitude coordinates for an internal point within each entity. The file is offered by State on tape or groupings of States on CD-ROM. CENDATA™ offers P.L. 94-171 data for counties, places, and, in 12 States, all or some county subdivisions.

The Census Bureau also prints out and sells listings from the tapes. The listings present all the data from the machine-readable file except the area measurements and coordinates. They also provide a 12th item for the population 18 years old and over: a total figure for that age group. (Users of the machine-readable versions must sum the race categories to get a total.)

There is a similar file for Puerto Rico: "Census of Population and Housing, 1990: Redistricting File—Puerto Rico." It is not associated with P.L. 94-171.

**Summary Tape Files (STF's)**

To prepare most of the 1990 census data products, the Census Bureau tallies, by computer, the basic record tapes containing individual information. This procedure produces specified summary statistics for various types of areas about persons, families, households, and housing units. The tabulated data are recorded on internal-use summary tapes which are used to generate the contents of printed reports and STF's.

Each STF comprises a particular set of tabulations for specific types of geographic entities. The records for all

entities on a given STF have the same format and content, unlike some printed reports in which data for larger areas are presented in greater detail than for smaller areas.

As the STF's become available, the Census Bureau's Customer Services offers free booklets listing their contents and providing other information. Technical documentation, discussed later, is furnished with the STF's or may be purchased separately. It provides information needed to use the files, such as definitions of terms.

Figure 5-5 summarizes basic information about the four major STF's and specifies which are offered on CD-ROM or microfiche as well as computer tape. Some STF 1 and 3 data also are available on CENDATA™. Figure 5-6 summarizes the geographic areas found on each file.

The Census Bureau also creates STF's similar in scope and structure for Puerto Rico and the Virgin Islands of the United States and versions of STF's 1 and 3 for the Pacific Outlying Areas. The files for the Virgin Islands of the United States and the Pacific Outlying Areas are offered on diskettes, as well as on tape.

**Highlights of STF Geography, Content, and Format—**

The four STF's are comparable in subject content and geographic coverage to STF's 1 through 4 from the 1980 census. The Census Bureau is not producing a file comparable to the 1980 STF 5, which had complex tabulations for places of 50,000 or more persons and larger areas. The 1990 subject reports and related subject summary tape files, discussed later, furnish similar data.

Each STF has three or more files (identified by a suffix; e.g., "A" or "B") that differ in the types of geographic entities reported. The technical documentation for each STF includes "Summary Level Sequence Charts," which outline the coverage of geographic entities in each file. Figure 5-7 presents an excerpt of the chart for STF 1A. As illustrated, sometimes the entities are organized hierarchically (e.g., summary level code 080 records provide data for census tracts or block numbering areas or their parts within place or remainder within county subdivision within counties) and sometimes the entities are "inventoried" (e.g., summary level code 160 records provide data for places organized alphabetically within State). The indentations in the geographic descriptions in figure 5-7 indicate hierarchical organization. For example, the entry "Place/Remainder" (of county subdivision), summary level code 070, is subordinate to "county subdivision." This indicates that the file contains summary data for each place (or part of a place) in the county subdivision and for the remainder of the county subdivision (the portion of the county subdivision outside the place(s)).

The Census Bureau generally sells the files by State, and the size and cost vary depending on the number of substate entities. For STF 1B, users may purchase county subfiles at \$175 per county, if they prefer. For STF's 2 and

## Figure 5–5. 1990 Census Summary Tape Files

**Summary Tape File  
(STF 1A, 1B, etc.)  
and data type  
(100 percent or  
sample)<sup>1</sup>**

	<b>Geographic areas</b>	<b>Description</b>
STF 1 (100 percent)	A <sup>2 3</sup>	States, counties, county subdivisions, places, census tracts/ block numbering areas (BNA's), block groups (BG's). Also, Alaska Native areas, State parts of American Indian areas, and congressional districts of the 101st Congress
	B <sup>2 3</sup>	States, counties, county subdivisions, places, census tracts/ BNA's, BG's, blocks. Also, Alaska Native areas, State parts of American Indian areas, metropolitan areas, and ubranized areas
	C <sup>3</sup>	U.S., regions, divisions, States (including summaries such as urban and rural), counties, places of 10,000 or more inhabitants, county subdivisions of 10,000 or more inhabitants in selected States, metropolitan areas (MA's), urbanized areas (UA's), American Indian and Alaska Native areas
	D	Congressional districts (CD's) of the 103rd Congress by State; and within each CD: counties, places of 10,000 or more inhabitants, county subdivisions of 10,000 or more inhabitants in selected States, Alaska Native areas, and American Indian areas
STF 2 (100 percent)	A	In MA's: counties, places of 10,000 or more inhabitants, and census tracts/ BNA's. In the remainder of each State: counties, places of 10,000 or more inhabitants, and census tracts/ BNA's
	B	States (including summaries such as urban and rural), counties, places of 1,000 or more inhabitants, county subdivisions, State parts of American Indian areas, and Alaska Native areas
	C	U.S., regions, divisions, States (including summaries such as urban and rural), counties, places of 10,000 or more inhabitants, county subdivisions of 10,000 or more inhabitants in selected States, all county subdivisions in New England MA's, American Indian and Alaska Native areas, MA's, UA's
STF 3 (Sample)	A <sup>2 3</sup>	States, counties, county subdivisions, places, census tracts/ BNA's, BG's. Also Alaska Native areas and State parts of American Indian areas
	B <sup>3</sup>	Five-digit ZIP Codes
	C <sup>3</sup>	U.S., regions, divisions, States, counties, places of 10,000 or more inhabitants, county subdivisions of 10,000 or more inhabitants in selected States, American Indian and Alaska Native areas, MA's, UA's
	D	CD's of the 103rd Congress by State; and within each CD: counties, places of 10,000 or more inhabitants, county subdivisions of 10,000 or more inhabitants in selected States. Also, American Indian and Alaska Native areas

Over 900 cells/ items of 100-percent population and housing counts and characteristics for each geographic area

Over 2,100 cells/ items of 100-percent population and housing counts and characteristics for each geographic area. Each of the STF 2 files will include a set of tabulations for the total population and separate presentations of tabulations by race and Hispanic origin

Over 3,300 cells/ items of sample population and housing characteristics for each geographic area

Figure 5-5. 1990 Census Summary Tape Files—Con.

**Summary Tape File  
(STF 1A, 1B, etc.)  
and data type  
(100 percent or  
sample)<sup>1</sup>**

	<b>Geographic areas</b>	<b>Description</b>
	A In MA's: counties, places of 10,000 or more inhabitants, and census tracts/ BNA's. In the remainder of each State: counties, places of 10,000 or more inhabitants, and census tracts/ BNA's	
STF 4 (Sample)	B State (including summaries such as urban and rural), counties, places of 2,500 or more inhabitants, county subdivisions of 2,500 or more inhabitants in selected States, all county subdivisions in New England MA's, State parts of American Indian areas, and Alaska Native areas	Over 10,500 cells/ items of sample population and housing characteristics for each geographic area. Each of the STF 4 files will include a set of tabulations for the total population and separate presentations of tabulations by race and Hispanic origin.
	C U.S., regions, divisions, States (including urban and rural and metropolitan and nonmetropolitan components), counties, places of 10,000 or more inhabitants, county subdivisions of 10,000 or more inhabitants in selected States, all county subdivisions in New England MA's, American Indian and Alaska Native areas, MA's, UA's	

<sup>1</sup>Similar STF's will be prepared for Puerto Rico and the U.S. Virgin Islands.

<sup>2</sup>Also available on microfiche. STF 1B microfiche provides only part of the data for blocks and other areas in the tape file. (See fig. 5-11.)

<sup>3</sup>Also available on laser disc (CD-ROM). STF 1B CD-ROM presents the same file extract as STF 1B microfiche.

4, the Census Bureau also offers State subfiles presenting data for specific race and Hispanic-origin groups (e.g., STF 2A data for the Asian and Pacific Islander population in California).

Aside from the P.L. 94-171 Data File, STF 1B is the only standard file that provides data for blocks, the smallest geographic units in the census. As discussed later, a subset of block data from STF 1B is presented on microfiche and CD-ROM.

STF's 1 and 2 have data based on questions asked of all respondents (the 100-percent component). STF's 3 and 4 contain sample data, which are estimates rather than complete census counts—estimates based, on the average, on a sample of one housing unit in every six. Since data from STF's 3 and 4 are based on sample information weighted to represent the total population, statistical totals in these files often differ—usually slightly—from comparable totals in STF's 1 and 2. (The effects of sampling procedures on the data are described in detail in ch. 6.)

The 1990 STF's contain records for all areas within each type of geographic entity they present. For example, STF 1A for a State has a record for each block group in the State, even those with no population or housing units. However, to simplify use of STF 1B, records for blocks with zero population and housing units are on the STF 1B Geographic Header file, which accompanies STF 1B. Each record also includes land and water area measurements and latitude and longitude coordinates for an internal point, which may approximate the geographic center of the entity.

**Technical Conventions**—Technical conventions specify important characteristics of machine-readable products and their presentation of data. Some key conventions

follow; others are described in the technical documentation that is available for each machine-readable product.

- **General Conventions**

**Standardized identification**—Geographic identification codes are in the same location in data records of all STF's. For example, the two-digit Federal Information Processing Standards (FIPS) State code always is in positions 133 and 134 of a record segment.

**Area names**—The geographic identification portion of the data records contains a name field.

**Multiple record types**—STF's 2 and 4 have multiple records to better accommodate the data presented for race groups and groups of Hispanic origin or descent identified separately. There are separate data records for specific race and Hispanic-origin groups in an area. (As noted earlier, users may purchase STF 2 and 4 subfiles presenting data for specific groups in a State<sup>1</sup>. This multiple record approach is similar to the structure of the 1980 STF 2 and 4 summary tapes, but, for the 1990 STF 4, there are no separate records for non-Hispanic ancestry groups. The 1990 approach involves these important features:

<sup>1</sup>While STF 2 and STF 4 are similar in structure, as presented in this discussion, they actually have a minor difference in file layout. On STF 2, all characteristic iterations are contained on one data file. To make a more usable product, STF 4 has a file segmentation based on the characteristic iteration. STF 4A will have 11 such record types, and STF 4B and C will have 50.

For example, the STF 4B for California would be segmented into 50 files based on the record types. The "A" records are in the first file, the "B total" records are in the second file, the "White" records in the third file, and so on. These differences should be kept in mind in the remainder of the description.

Figure 5-6. Areas Summarized on 1990 Summary Tape Files (STF's)

	STF 1	STF 2	STF 3	STF 4
United States, regions, divisions .....	C	C	C	C
States and statistical equivalents .....	A, B, C, D	A, B, C	A, C, D	A, B, C
Metropolitan areas (MA) .....	B <sup>1</sup> , C	A <sup>1</sup> , C	A <sup>1</sup> , C	A <sup>1</sup> , C
Urbanized areas .....	B <sup>1</sup> , C	C	A <sup>1</sup> , C	C
Counties and statistical equivalents .....	A, B, C, D	A, B, C	A, B, C, D	A, B, C
Rural population by county .....				B
Farm population by county .....				B
Places by population size:				
Under 1,000 .....	A, B		A	
1,000 to 2,499 .....	A, B	B	A	
2,500 to 10,000 .....	A, B	B	A	B
10,000 and over .....	A, B, C, D	A, B, C	A, C, D	A, B, C
County subdivisions <sup>2</sup> .....	A, B	B	A	
MCD's in 12 States <sup>3</sup> .....	A, B, C <sup>4</sup> , D <sup>4</sup>	B, C <sup>4</sup>	A, C <sup>4</sup> , D <sup>4</sup>	B <sup>5</sup> , C <sup>6</sup>
MCD's in 6 States <sup>7</sup> .....	A, B, C <sup>8</sup>	B, C <sup>8</sup>	A, C <sup>8</sup>	B <sup>6</sup> , C <sup>8</sup>
Census tracts/BNA's .....	A, B	A	A	A
Block groups .....	A, B		A	
Blocks .....	B			
ZIP Codes .....			B	
Congressional districts .....	A <sup>9</sup> , D <sup>10</sup>		D <sup>10</sup>	
American Indian and Alaska Native areas .....	A <sup>1</sup> , B <sup>1</sup> , C, D <sup>1</sup>	B <sup>1</sup> , C	A <sup>1</sup> , C, D <sup>1</sup>	B <sup>1</sup> , C

<sup>1</sup>If split by State boundaries, summaries are provided for State portions only.

<sup>2</sup>Includes all county subdivisions in the 50 States, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands. Comparable areas for the Pacific Outlying Areas (POA's) are on the two files issued for POA's: STF's 1 and 3.

<sup>3</sup>States in the Northeast Region (Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont), plus Michigan, Minnesota, and Wisconsin.

<sup>4</sup>Only county subdivisions of 10,000 and over.

<sup>5</sup>Only county subdivisions of 2,500 and over.

<sup>6</sup>County subdivisions under 2,500—only if in a metropolitan area in New England.

<sup>7</sup>States in the New England Division (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont).

<sup>8</sup>County subdivisions under 10,000—only if in a metropolitan area in New England.

<sup>9</sup>Contains data for districts of the 101st Congress.

<sup>10</sup>Contains data for districts of the 103rd Congress.

Figure 5-7. Excerpt From Summary Level Sequence Chart for STF 1A in Technical Documentation

Summary level area	Summary level code	Geographic component code
State	040	00 40 42
State—County	050	43 44 00
State—County—County Subdivision	060	00
State—County—County Subdivision—Place/Remainder	070	00
State—County—County Subdivision—Place/Remainder—Census Tract/ Block Numbering Area	080	00
State—County—County Subdivision—Place/Remainder—Census Tract/ Block Numbering Area—American Indian/Alaska Native Area/ Remainder—Reservation/Trust Lands/Remainder—Alaska Native Regional Corporation/Remainder—Congressional District—Block Group	091	00
State—County—Census Tract/Block Numbering Area	140	00
State—County—Census Tract/Block Numbering Area—Block Group	150	00
State—Place—County	155	00
State—Place	160	00
State—Consolidated City	170	00
State—American Indian Reservation with Trust Lands	210	00
State—American Indian Reservation with Trust Lands; reservation only	211	00

- The files include two types of records: "A" and "B." "A" records are presented for the total population of each tabulation area. "B" records are presented for the total population and then repeated for each component group.
- The STF 2 "B" records provide data for a larger number of race groups than did the 1980 STF 2. The STF 4 "B" records also have data for more Hispanic categories than the 1980 STF 4.
- In both STF's 2 and 4, record A appears first and only once for each area.
- All records of the same type (A or B) are the same length within any given file.

Each area on STF 2A can have up to 10 repetitions of record B: total population; five race groups (White; Black; American Indian, Eskimo, or Aleut; Asian or Pacific Islander; and "other race"); Hispanic origin; White, not of Hispanic origin; Black, not of Hispanic origin; and other races, not of Hispanic origin. An array of 54 tables of data is presented for each group.

Each area on STF 2B and 2C can have up to 34 repetitions of record B. These repetitions are for the total population ("All persons") and the race and Hispanic-origin categories shown in figure 5-8.

Repetitions of B records on STF's 4A, 4B, and 4C are analogous to those for STF 2. STF 4A also provides the 10 repetitions of record B noted for STF 2A. STF's 4B and 4C provide data for the 34 race and Hispanic origin categories, plus 15 "Other Hispanic" categories (see fig. 5-8).

Separate B records are especially useful in presenting data for groups that are represented in only a relatively few areas. (If a group is not represented in an area, no record appears and no space is used unnecessarily on the tape.) A disadvantage of having separate records for each race and Hispanic-origin category is that composite tabulations are more difficult to prepare. For example, to construct a race-by-age matrix for an area from STF 2, a user must extract and reformat an age tabulation from each B record for a race. In contrast, there is only one type of record on STF's 1 and 3, but relatively few data cells are cross-tabulated by race.

• **Tape Conventions**

**Densities**—The Census Bureau offers 6250 bpi (1600 bpi by special request) on 9-track tape on reels. The IBM 3480-compatible tape cartridges offer a standard density. They are operable with Storage Tek 4780 tape subsystems and Digital Equipment Corporation VAX TA90 subsystems.

**Recording language**—Users may choose EBCDIC or ASCII.

Figure 5-8. **Race and Hispanic-Origin Groups for Which Characteristics Are Reported on B Records of STF 2B, 2C, 4B, and 4C**

**On STF 2B, 2C, 4B, and 4C:**

- All persons
  - White
  - Black
  - American Indian, Eskimo, Aleut
    - American Indian
    - Eskimo
    - Aleut
  - Asian or Pacific Islander
    - Asian
      - Chinese
      - Filipino
      - Japanese
      - Asian Indian
      - Korean
      - Vietnamese
      - Cambodian
      - Hmong
      - Laotian
      - Thai
    - Pacific Islander
      - Hawaiian
      - Samoaan
      - Guamanian
  - Other race
- Hispanic origin (of any race)
  - Mexican
  - Puerto Rican
  - Cuban
  - Other Hispanic
  - White, not of Hispanic origin
  - Black, not of Hispanic origin
  - American Indian, Eskimo, Aleut, not of Hispanic origin
  - Asian or Pacific Islander, not of Hispanic origin
  - Other race, not of Hispanic origin

**Additional Hispanic Categories Under "Other Hispanic" on STF 4B and 4C:**

- Dominican (Dominican Republic)
- Central American
  - Costa Rican
  - Guatemalan
  - Honduran
  - Nicaraguan
  - Salvadoran
  - Panamanian
- South American
  - Argentinian
  - Chilean
  - Colombian
  - Ecuadoran
  - Peruvian
  - Venezuelan

Figure 5-9. STF 3 Data Dictionary Excerpt From Technical Documentation

**TABLE (MATRIX) SECTION—(Con.)**

Table (matrix) number	Table (matrix)	Starting position	Starting position within segment	Table (matrix) coordinates
P96.	RETIREMENT INCOME IN 1989(2) [2] <i>Universe: Households</i>			
	With retirement income.....	18734.....	2884.....	1
	No retirement income.....	18743.....	2893.....	2
P97.	OTHER TYPE OF INCOME IN 1989(2) [2] <i>Universe: Households</i>			
	With other income.....	18752.....	2902.....	1
	No other income.....	18761.....	2911.....	2
P98.	AGGREGATE WAGE OR SALARY INCOME IN 1989(1) [1] <i>Universe: Households</i>			
	Total.....	18770.....	2920.....	1
P99.	AGGREGATE NONFARM SELF-EMPLOYMENT INCOME IN 1989(1) [1] <i>Universe: Households</i>			
	Total.....	18785.....	2935.....	1

**Labels**—The Census Bureau generally includes standard IBM ANSI labels or provides unlabeled tape on request.

**Record segmentation**—Logical records on 1990 summary data files range in size from 500 to more than 60,000 characters. Each logical record is subdivided into segments not exceeding 8,192 characters, to accommodate block-size limitations on ASCII tape. Each segment has all required geographic identifiers so that it can be handled separately in sorting or other operations. Tape purchasers can specify a block size of up to 32,000 characters as long as it is an even multiple of the record segment size.

- **CD-ROM Conventions**

The discs hold up to 650 megabytes of data and are the standard 4 3/4 inch size, which is suitable for all CD-ROM readers for use with personal computers. The discs generally are in dBase III+ format and require an operating system of MS-DOS 3.1 or higher. The discs come with simple retrieval and display software, and technical documentation. (Instructions are included for converting the file to ACSII, should that be preferred.)

**Technical Documentation**—Documentation provides detailed information about the computer files. It includes such features as an abstract of the file, guidelines on how to use the file, table outlines, a data dictionary (discussed below), a questionnaire facsimile, and definitions of geographic and data subject terms. Technical documentation also

contains a statement on accuracy of the data. For files presenting sample summary data, the statement includes estimates of sampling errors and a detailed description of the sample design and weighting procedures.

The data dictionary in the technical documentation describes the location, length, and the number of implied decimal places for each data field in the data record. It also includes descriptive labels for each data item. Figure 5-9 shows an excerpt from the data dictionary for STF 3.

The Census Bureau provides machine-readable versions of the data dictionary with each file. Users find them convenient for supplying identifying labels for data items. The dictionaries also can be used to communicate the format of the data file directly into a computer program or generalized software package, a feature that reduces the amount of programming or input-file specification required.

The Census Bureau furnishes one copy of the technical documentation with each data file. Users also can purchase technical documentation separately.

**Software**—Census data are stored on computer tape and other machine-readable products as strings of digits, with the data grouped into logical records. If they were printed onto paper just as they are stored, the result would be a mass of unlabeled digits. Software can enable the computer to perform such tasks as displaying the data in an understandable form, rearranging the data, and analyzing the data. Users who choose to work directly with census files may design their own software or purchase software from others. (Ch. 7 has information on sources of various kinds of assistance, including software.) The Census Bureau

does not offer a software-preparation service and generally does not provide software with machine-readable files. However, it does include simple retrieval/display software on the 1990 census CD-ROM's.

### Subject Summary Tape Files (SSTF's)

The Census Bureau also prepares a number of subject files. Each is the source of one or two subject reports (described earlier) and also is available to the public on computer tape and CD-ROM's. The SSTF's provide the data for more geographic areas than the subject reports. The reports generally present data for only the United States, regions, and divisions; the SSTF's usually report data for States, metropolitan areas, and large counties and places as well. The files also are designed to help meet the data needs fulfilled in the 1980 census by *Detailed Population Characteristics* (PC80-1-D), *Metropolitan Housing Characteristics* (HC80-2), and STF 5.

### Other Summary Files

The Census Bureau prepares several specialized files, released in the Summary Tape File—Supplementary (STF-S) series. The files described below are among those in the series. (See the "Special Tabulations" section, later in this chapter, for information on files sponsored by other Federal agencies.)

**Population and Housing Counts File (STF-S-1)**—This supplementary file, released early in 1991, provides counts of total housing units, vacant housing units, total population, and group quarters population. The entities covered are States, counties, county subdivisions, places, and American Indian and Alaska Native areas. The record for any particular entity also includes related codes and the entity name.

**1990 Census/Equal Employment Opportunity (EEO) File**—This supplementary file, available on computer tape, CD-ROM's, and microfiche, has sample census data to support planning to help assure equal employment opportunity. A supplemental report based on the file also is available, as noted earlier in the "Printed Reports" section. The file contains tabulations showing detailed occupations, and educational attainment data by age. These data are cross-tabulated by sex, Hispanic origin, and race. There are tables for all States, counties, metropolitan areas, and places of 50,000 or more persons.

**County-to-County Migration File**—This supplementary file, available on computer tape and CD-ROM's, is issued by State and provides summary records for all intrastate county-to-county migration streams and significant interstate county-to-county migration streams. Each record includes codes for the geographic area of origin, codes for the geographic area of destination, and selected characteristics of the persons who made up the migration stream.

## Public-Use Microdata Samples (PUMS)

Public-use microdata samples (PUMS) are data files on tape or CD-ROM's that contain records for a sample of all housing units, with information on the characteristics of each unit and the people in occupied housing units and group quarters. The Census Bureau offers a PUMS that provides a 1-percent sample and another with a 5-percent sample. (In addition, there are 1- and 5-percent PUMS for Puerto Rico, a 5-percent for the Virgin Islands of the United States, and a 10-percent for Guam.)

The sample records are drawn from households that responded to the long-form. To protect the confidentiality of respondents, the Census Bureau excludes identifying information from the records. Within the limits of the sample size and geographic detail provided, these files permit users with special needs to prepare virtually any tabulations of the data they may desire.

**Comparison of Summary Data and Microdata**—Figure 5–10 illustrates the basic distinctions between summary data and microdata. Summary data are the type found in census printed reports, summary tape files, microfiche, and most special tabulations. In summary data, the basic unit of analysis is a specific geographic entity (for example, a census tract, county, or State) for which counts of persons, families, households, or housing units in particular categories are provided. In microdata, the basic unit is an individual housing unit and the persons who live in it. The user determines the structure of the tabulation and the characteristics to be tabulated. Geographic detail is limited to the large areas identified on microdata records. Microdata records for public use are presented in a manner that avoids disclosure of information about any specific household or individual. The records contain no names or addresses. The Census Bureau also limits the detail on place of residence, place of work, high and low incomes, and selected other items to further protect the confidentiality of the respondents. Only geographic areas with more than 100,000 inhabitants are identified. In addition, microdata samples include only a small fraction of the population, further limiting the chance that the record of a given individual is even contained in the file, much less identifiable.

**Uses of PUMS**—The microdata samples make possible do-it-yourself special tabulations. The 1990 census files furnish much of the richness of detail recorded in the census. Microdata users frequently are interested in relationships among census variables not shown in existing census tabulations or in the characteristics of certain specially defined populations, such as unemployed homeowners or families with four or more children. Since the samples provide data for all persons living in a sample-household, users can study how characteristics of household members are interrelated (for example, income and educational attainment of husbands and wives).

Subject to the limitations on sample size and geographic identification, it is possible for the user to generate tabulations interrelating any desired set of variables. Users

Figure 5-10. Comparison of Summary Data With Information on Microdata Files

**SUMMARY DATA**

- Basic unit is an identified geographic entity
- Data summarized on people and housing in specified entity
- Available for small areas

**ILLUSTRATIVE SUMMARY DATA**

Place	Total population	Occupied housing units	Persons per unit	Renter occupied units	Gross rent		
					Under \$100	\$100-149	\$150-199
Weston City	110,938	49,426	2.2	31,447	158	1,967	6,282
Smithville	21,970	7,261	3.1	2,492	17	90	766
Junction	17,152	5,494	2.7	822	11	29	238

**PUBLIC-USE MICRODATA**

- Basic unit is an unidentified housing unit and its occupants
- Unaggregated data to be summarized by the user
- Allows detailed study of relationships among characteristics
- Not available for small areas

**ILLUSTRATIVE MICRODATA\***

	State of residence	PUMA	Persons in household	Telephone	Complete plumbing	Monthly rent	Vehicles	Household type
Housing unit #1	Virginia	Area name or code	3	Yes	Yes	\$525-549	2	Married-couple family
	Housing unit no.	Relationship	Sex	Age	Race	Place of birth	Occupation	Earnings
Person a	1	Householder	M	37	W	Kansas	Plumber	\$28,100
Person b	1	Spouse	F	35	W	Virginia	NA	0
Person c	1	Child	M	6	W	Virginia	NA	0
Housing unit #2	Virginia	Area name or code	1	Yes	Yes	\$650-699	1	Nonfamily householder
Person a	2	Householder	F	62	B	Alabama	Postsecondary economics teacher	\$45,300
Housing unit #3	Virginia	Area name or code	0	N/A	Yes	\$300-324	N/A	Vacant

\* Public-use microdata samples do not actually contain alphabetic information. Such information is converted to numeric codes; for example, the State of Virginia has a numeric code of 51.

have the same freedom to manipulate the data that they would have if they had collected the data in their own sample survey, but with the thoroughness of census data collection techniques and with sample sizes larger than feasible in an independent survey.

To summarize, microdata samples are useful in doing research or analysis that does not require the identification of specific small geographic areas.

**Subject Content**—Microdata files generally contain the full range of population and housing information collected in the 1990 census: all occupation categories, age by single years, reported income, and so forth. Users can learn about the contents of the microdata files in a general way by reviewing the long-form questionnaire located at the end of chapter 2. Where the detail on microdata files is not apparent from the item on the questionnaire, guidance is provided in the PUMS technical documentation.

**Sample Size**—The Census Bureau prepares two nonoverlapping samples, the 5-percent and the 1-percent, each featuring a different geographic scheme, as discussed below. Each record in these files contains a variable that permits selection of scientifically designated subsamples or extracts (for example, a 1-in-1,000 sample).

The Census Bureau also may produce a 3-percent microdata sample, sponsored by other Federal agencies, that focuses on the older population. It would include only households with at least one person age 60 or older, to provide a large enough sample for even the oldest age groups to permit preparing reliable detailed cross tabulations by age, sex, race, and other characteristics. Records in this sample would include a State public service area (PSA) code whenever the PSA has the same boundaries as the public use microdata area (PUMA) already identified in the record.

In preparing PUMS files, the Census Bureau generates up to 17 1-percent samples. Those samples not used in creating the files just discussed are available to fill special requests for other microdata files.

**Geographic Identification**—The 5-percent and 1-percent samples will each feature a different geographic scheme. The PUMS technical documentation includes maps and equivalency files identifying all PUMA's.

In the 5-percent sample of housing units, each household record has codes to let the user know in which PUMA—such as a group of counties, a single county, or a place—the household is located. Each area identified must have a 1990 census population of at least 100,000 and may not cross State lines.

In the 1-percent sample of housing units, each household record includes codes associating it with a metropolitan area and/or other large areas, the boundaries of which may cross State lines. (For the 1980 census, there were two 1-percent sample files. The 1-percent sample showing data for selected urbanized areas and other large areas is not being produced for the 1990 census.)

**Selecting the Right PUMS**—Reliability increases with sample size, so the choice of sample size must represent a balance between the level of precision desired and the resources available for working with microdata files. Using tables in PUMS technical documentation, one can estimate how much sampling error will affect any specific number prepared from a microdata file of a particular sample size. In many instances, users will find the 1-percent sample or an extract from it large enough to provide sufficiently reliable estimates. But if users contemplate extremely detailed tabulations or are concerned with small segments of the population (for example, males 65 years old and over of Polish ancestry), the 5-percent sample would be the best choice.

Technical documentation accompanies PUMS files sold by the Census Bureau's Customer Services and also may be purchased separately.

**Software Considerations**—The 1990 public-use microdata files are a special type of nonrectangular file. They are hierarchical; a file contains two record types, each with different variables, rather than one gigantic rectangular record with all the variables. The file is sorted to maintain the relationship between both record types. The Census Bureau releases the PUMS in this format because of the tremendous amount of data contained in one record. Although these records are extremely large they can be handled by most statistical or report writing software. There are two basic record types: the housing unit record and the persons record. For 1990, each of the records contains a serial number that links the persons in the housing unit to the proper housing unit record, so a user does not need to worry about keeping the original record sequence.

Most standard statistical software packages now are capable of handling the file in either hierarchical or rectangular format. Most software packages, such as SAS, SPSS, BMDP, and some relational data base systems, will in fact rectangularize hierarchical files. Further, the manuals accompanying most packages contain samples of code showing how to process the files. Several of the packages also have extract procedures already coded into the software.

The 1990 PUMS will be accompanied by machine-readable data dictionaries in a format which will allow the user to read in ASCII characters and prepare statements transforming the variables and their corresponding descriptions and values to the proper statements required by the software package of choice.

The files will be in ASCII to be compatible with most software packages. But the technical documentation will include a section on "how to use this file," where software concerns will be addressed. The user must be familiar with the processing system's limitations and the efficiency of the various procedures within the software packages.

Users may also write their own code enabling them to perform custom tabulations on their system of choice.

**Corresponding Microdata From Earlier Censuses**—PUMS files also are available from the censuses of population and housing of 1940 through 1980. The sample sizes, geographic areas reported, and file formats vary, but because many subjects are the same or similar from census to census, these files represent a rich resource for the analysis of trends. For more information, contact the National Archives (202-501-5579) regarding the 1940 through 1970 files, and Customer Services, Bureau of the Census, (301-763-4100) regarding the 1980 file.

## MICROFICHE FROM SELECTED SUMMARY TAPE FILES

As described earlier in this chapter, the 1990 census report series are available on microfiche as well as in print. Microfiche presenting data from selected STF's also are offered by the Census Bureau.

The Census Bureau generates microfiche of data on tape directly from selected STF's using "computer output microform" (COM) equipment. The microfiche products present files that cover, among other areas, those geographic entities without data in printed reports, including blocks and block groups (BG's). Microfiche present data from the following files: STF 1A, STF 1B extract (a subset of the tabulations for blocks available on tape), and STF 3A. (See fig. 5-5.) The Census/ EEO File, discussed earlier, also is offered on microfiche. Figure 5-11 shows the data subset for blocks from STF 1B that is carried on microfiche. The same data subset also is available on CD-ROM.

The frames or images on each microfiche present the data in tabular form, with header and stub entries identifying each data item. These page images are designed to be magnified at a 42x ratio. There are up to 208 page images per microfiche.

The *Population and Housing Characteristics* microfiche of STF 1A present data hierarchically for the basic summary levels—States (and entities equivalent for statistical

purposes), counties (and statistically equivalent entities), county subdivisions, places, census tracts/ BNA's, and BG's. They also include data for congressional districts of the 101st Congress. (See fig. 5-7 for a graphic representation of a portion of STF 1A geography.) All data found on tape or CD-ROM versions of STF 1A are included—about 1,000 items of 100-percent data. Many users of small-area data should find the microfiche of value because of its coverage of BG's, for which no printed data will be available from the Census Bureau. In addition, the 100-percent data on microfiche for county subdivisions and less-populated places provide more detail than the data in printed reports.

The data for each geographic entity on STF 1A microfiche require several frames. One frame on each microfiche contains an index to the entities covered on that microfiche. The STF 1A microfiche can be purchased either by State or by county.

STF 1B extract microfiche, titled *Population and Housing Characteristics for Blocks*, offers a limited selection (see fig. 5-11) of the STF 1B data for blocks. The data also are summarized for BG's, census tracts/ BNA's, and larger areas. The microfiche present the same data as the STF 1B-extract CD-ROM's. They are sold by State or county.

STF 3A microfiche, titled *Social, Economic, and Housing Characteristics*, present data for the same geographic entities as STF 1A. The microfiche contain the same data as found on tape or CD-ROM versions of STF 3A—about 3,300 items of sample population and housing data. They are sold by State or county.

## USER-DEFINED AREAS TABULATIONS

The Bureau of the Census introduced a new product service in conjunction with the 1990 census—the User-Defined Areas Program (UDAP). Through this program, the Census Bureau offers, for a fee, a set of tables showing sample data on demographic, social, economic, and housing characteristics from the 1990 census for geographic

*Census Bureau data come in many forms: in printed reports, on microfiche, computer tape, floppy diskette, and compact disc.*

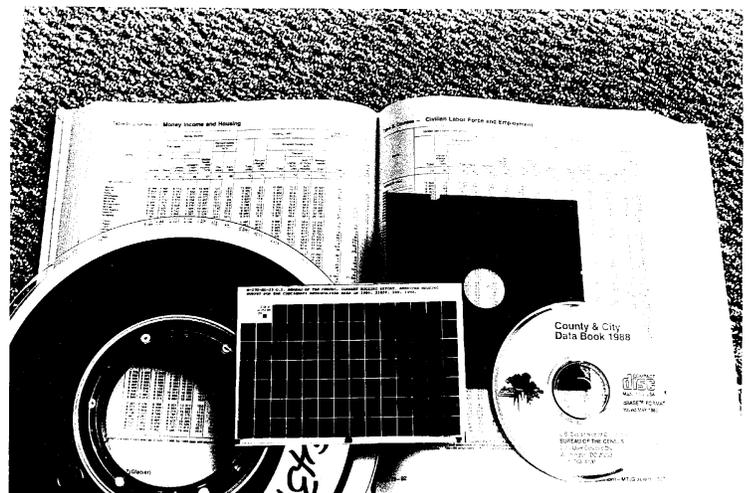


Figure 5-11. 1990 Census Block Statistics Format on Microfiche

[Illustrative]

Census Tract and Block Numbering Areas Block Group Block	All persons							
	Total	Race				Hispanic origin (of any race)	Age	
		White	Black	American Indian, Eskimo, Aluet	Asian or Islander		Under 18 years	65 years and over
Smithfield township: .....								
Surfside (CDP): .....								
Tract 6017 .....								
BG 1.....								
Block 101 .....								
Block 102 .....								
Block 103 .....								
Block 104 .....								
Block 105 .....								
Block 106 .....								
Block 107 .....								
Block 108 .....								

—Continued—

All housing units				Occupied housing units								
Total	1 unit, detached or attached	10 or more units	Mean number of rooms	Owner occupied		Renter occupied			With 1.01 or more persons per room	Family house- holder, no spouse, 1 or more persons under 18 years	1-person house- holds	Persons in occu- pied hous- ing units
				Total	Mean value (in dollars) specified owner	Total	With 1.01 or more persons per room	Mean contract rent				

areas defined by the users—such as neighborhoods, marketing territories, school attendance areas, State legislative districts, American Indian subreservation areas or service areas, and business zones.

The Census Bureau provides customers with 1990 census block-numbered maps on which to delineate and identify their areas. Alternatively, customers may submit block equivalency files in computer-readable form, or they may submit boundary information electronically if the submissions are based on the 1990 Census TIGER/Line™ files.

To participate in the UDAP, users must: (1) delineate areas in terms of whole census blocks or higher-level census geography following one of the procedures above; (2) provide a set of names and/or codes for the areas; (3) make sure the areas do not have overlapping boundaries; and (4) in cases where organizations are planning a combined order, resolve any boundary disagreements before submitting the geographic materials.

Later, the Census Bureau provides purchasers with maps that display the final boundaries and with printed data tables. Narrative profiles are available as an option for an additional fee. These profiles are descriptive observations focusing on key population and housing characteristics of each user-defined area. The Census Bureau also will offer UDAP data on computer tape and flexible diskettes for an additional fee.

A nonrefundable \$25 deposit must be paid when a preliminary order is submitted to cover order preparation costs. The Census Bureau will calculate the total cost of the order and return the order form to the customer for final payment. In general, the larger the area, the greater the cost. As a cost-savings measure, two or more groups requiring data for the same areas may place a single order.

Since sample census data are involved, the Census Bureau will not begin processing UDAP data until the fall of 1992. Delays or unforeseen problems with standard products may result in a later start.

General questions about the UDAP and inquiries regarding the number of map sheets or blocks that comprise an area of interest may be directed to the UDAP staff, Decennial Management Division (301-763-4282). Write or call Customer Services (301-763-4100) for an information packet and a UDAP order form. The address is: Customer Services, Bureau of the Census, Washington, DC 20233-8300.

## SPECIAL TABULATIONS

Despite the tremendous amount of data available to users through regular 1990 census products and UDAP tabulations, some users have specialized needs not met by these products. In view of this, the Census Bureau prepares special 1990 census tabulations on a cost-reimbursable basis.

The Census Bureau concentrates its resources on special tabulations that only it can perform, such as those requiring use of its confidential data files. As in all Census Bureau products, these tabulations exclude any information that could identify a specific individual, household, or housing unit.

The Census Bureau generally does not prepare rearrangements or reaggregations of data from 1990 census summary tape files or microdata files released for public use. Users normally will find it less costly and more timely to obtain such tabulations from State Data Centers or data processors listed with the National Clearinghouse for Census Data Services. (See ch. 7.)

The special tabulation output may be on printouts, computer tapes, diskettes, CD-ROM's, or microfiche, depending on the user's needs.

The Census Bureau also has a program for determining the population count, as of the last decennial census or a Federal special census, for new governmental units, municipal intercensal annexations, and other special boundary situations. The Census Bureau provides the counts to the requesting municipality or organization and appropriate State agencies.

### Illustrations of Special Tabulations

Special tabulations vary greatly in terms of size, complexity, and cost. The following discussion suggests the wide range of possibilities.

Tabulations from the Census Bureau's internal summary files might accommodate some users who need detailed race or Hispanic-origin characteristics for census tracts or certain other small areas. For example, a researcher might wish to study the characteristics of the Vietnamese population by census tract in a community with a high concentration of that race. STF's 2A and 4A, which provide detailed data for census tracts, do not present data separately for the Vietnamese population. However, because the Census Bureau's internal files have such detail already tabulated, the Census Bureau could generate the desired data for a relatively low cost.

A somewhat more expensive category of special tabulations uses a standardized output format but requires manipulation of the Census Bureau's confidential basic record tapes. For example, the Census Bureau could produce sample data such as those presented in STF 4 for specially defined universes, such as particular ancestry groups, condominium residents in a city, or all persons who immigrated into the United States between 1980 and 1990 for specified counties.

The special tabulation also can yield data tailored to highly specialized content or format requirements. This kind of special tabulation is far more expensive than one involving standardized output because of the staff time required for specification, programming, review, and documentation of the data. One major special tabulation from a past census called for a massive cross tabulation of occupation by industry by class of worker by sex for States and large metropolitan areas. The purchaser could have produced this kind of data from a PUMS file, but because the tabulation involved many small cells, a special tabulation of the full census sample was needed to produce sufficiently accurate data.

Other special tabulations may involve subject matter or geographic detail not available on the public-use microdata samples. Characteristics of persons with very high incomes, persons identifying themselves as belonging to selected American Indian tribes, or persons who lived in selected counties 5 years ago fit in this category. As an example of special geographic detail, a city's chamber of commerce might request a tabulation of the income and other characteristics of workers by place of work (the city's business districts and industrial areas, in this case), so that the chamber could provide merchants and other business people with data helpful in selecting product lines and planning services for this segment of their weekday customer base.

### Arrangements for Special Tabulations

The price of a special tabulation depends on such factors as the quantity of data to be processed and the complexity of programming required. Special tabulations for the entire United States or tabulations requiring custom programming generally cost many thousands of dollars. From the time a customer's funds are received, a project may take from several weeks to a year or more, depending on the scope of the tabulation and the Census Bureau's workload.

For the more complex special tabulations, working out detailed specifications is usually a time consuming process. Users may start out with just a general notion of wanting, for example, age by income by family type for specified census tracts or counties. Work cannot begin—indeed, a good cost estimate cannot be provided—until these ideas are worked out in terms of specific categories desired and, in some cases, the specific table formats required. If age and income are to be cross tabulated by family type, is it the age of each person or the age of the

householder that is to be taken into account? Is income to be tabulated in terms of individual income, family income, or household income? Are persons not in families to be excluded or tabulated separately alongside the family-type categories?

The Census Bureau provides free cost and delivery date estimates for special tabulations. The request must be specific as to the proposed table content and geographic areas to be tabulated. Users interested in discussing a special tabulation should contact either the Population Division (301-763-5476) or the Housing and Household Economic Statistics Division (301-763-8553), depending on the basic type of data needed. Users interested in obtaining census counts for new governmental units, municipal annexations, or other special boundary situations should contact the Geography Division (301-763-3827).

### Special Tabulations Sponsored by Other Federal Agencies

Other Federal agencies sometimes sponsor special tabulations that result in data of interest to users outside of the agency. Two such tabulations, already being planned, are described here.

**School District Data File**—The Census Bureau plans tabulations, with subject-matter content similar to STF 3, for the Nation's school districts. The States have provided the necessary boundary information. The National Center for Education Statistics (NCES), part of the U.S. Department of Education, is funding the project and will receive the data files from the Census Bureau beginning late in 1992. The NCES will distribute a copy of the file for each State to the education agency of the State and sell copies to other interested users. For further information, contact the Census Bureau's Population Division (301-763-5476).

**Census Transportation Planning Package (CTPP)**—The Census Bureau is preparing this special tabulation of transportation-related data for transportation analysis zones and larger areas. It includes data by place of residence, by place of work, and from a cross tabulation of place of residence by place of work for use in studying commuting patterns. The CTPP expands on its predecessor, the 1980 Urban Transportation Planning Package, by providing, in addition to metropolitan area data, a set of statewide tabulations showing data on the characteristics of workers presented by place of residence cross-tabulated by place of work for places with a population of 2,500 or more within each State. Distribution of the statewide CTPP tabulations to State transportation agencies is expected to begin during the last half of 1992, followed by distribution of the metropolitan area tabulations. The CTPP is sponsored by the U.S. Department of Transportation and other organizations. Additional information may be obtained by contacting the Journey-to-Work and Migration Statistics Branch, Population Division, Bureau of the Census, Washington, DC 20233; 301-763-3850.

## GUIDELINES FOR OBTAINING DATA PRODUCTS

Users have several options for obtaining the 1990 census data they need. This section spells out what they are for each type of product. First, though, users generally need to check on whether the data products of interest to them have been issued, determine prices, and get directions for ordering. Here is how to get such information.

- Call or write Customer Services, Bureau of the Census, Washington, DC 20233; 301-763-4100; fax, 301-763-4794. Customer Services usually can furnish more information about a product than is provided in this chapter. Often such material is free; sometimes, as in the case of technical documentation, there is a charge.
- Access by modem the Census Bureau's free electronic bulletin board (301-763-1568), which, in addition to product-ordering information such as price and GPO stock number, includes information on any problems with the 1990 census products and related corrections.
- Subscribe to the *Daily List* (\$300 per year; payment should be made to "Commerce-Census") or *Monthly Product Announcement* (free). Both are available through Customer Services. They also carry information about products from other censuses, surveys, and estimates programs.
- Access by modem CENDATA™, the Census Bureau's online information system, available for a fee through CompuServe (800-848-8199) and DIALOG (800-334-2564). In addition to product status information, CENDATA™ presents selected data from the 1990 census and other statistical products.
- The U.S. Government Printing Office (GPO) can tell callers if particular reports are in stock and how much they cost. It helps to have a report's GPO stock number, found in the *Monthly Product Announcement* and other sources noted above, when calling. The phone number is 202-783-3238; fax, 202-512-2250.

For more information about these information resources, see chapter 7.

### Published Data

**For Sale**—The Superintendent of Documents (U.S. Government Printing Office, Washington, DC 20402) handles the sale of most Census Bureau publications. If the GPO exhausts its supply of a report, the Census Bureau may have some copies on hand to sell. The GPO accepts payment in several forms: check or money order made payable to "Superintendent of Documents," charge to a GPO deposit account, or charge to a VISA or MasterCard account. Charged orders may be made by telephone or fax (see numbers above). In general, users cannot order reports from the GPO in advance of their publication. However, if one is ordering an entire series of reports (for

example, 1990 CP-1 for the United States, all States, the District of Columbia, Puerto Rico, and the Virgin Islands of the United States), the GPO will accept a standing order, provided that the publications are being charged to a GPO deposit account, or to a VISA or MasterCard account. To initiate a standing order, a customer must submit GPO Form No. 3468, "Authorization for Standing Order Service." (A separate form is required for each series desired.) Users can get forms by contacting Department 40, Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; 202-512-2315.

The Census Bureau's Customer Services sells photocopies of 100-percent tables from these reports: *Population and Housing Characteristics for Census Tracts and Block Numbering Areas* (1990 CPH-3). These tables are prepared in advance of the printed reports, which also contain sample tables.

When ordering table photocopies or the other products cited below from Customer Services, users may pay by sending a check or money order made payable to "Commerce-Census," charging to a Census deposit account, or charging to VISA or MasterCard accounts. The address is Customer Services, Bureau of the Census, Washington DC 20233-8300; telephone, 301-763-4100; fax 301-763-4794.

**For Reference**—People who do not wish to purchase every 1990 census report they may need often will be able to find reports for reference use at a library, State Data Center affiliate, Census Bureau regional office, or other organization. Some Census and Federal depository libraries receive all Census Bureau publications. Others will have selected reports; for example, they may have only those for their State or region of the country. For more information and the addresses of some of these organizations, see chapter 7.

### Microfiche

**For Sale**—The Census Bureau, through Customer Services, sells microfiche of the 1990 census reports and certain STF's, as noted earlier. The price depends on the number of microfiche involved. In general, the price per microfiche decreases as the quantity ordered increases. Customer Services can furnish more information.

**For Reference or Paper Copy**—Users may have access to microfiche data at a local library, State Data Center affiliate, or other organization. Also, they may be able to purchase the information they need from a State Data Center or other organization.

## Machine-Readable Files and Support Materials

**For Sale**—Users may buy summary tape files, microdata files, technical documentation, and other files and materials from Customer Services. Also, State Data Centers, Business/ Industry Data Centers, and organizations on the roster of the Census Bureau's National Clearinghouse for Census Data Services often sell tapes, software, and related materials. In addition, they may sell printouts prepared from the tapes, special reports, area profiles, and computer-generated statistical maps. (For a more complete discussion of the services of these organizations, see ch. 7.)

**For Reference**—Some State Data Centers and other organizations may maintain a collection of special reports and printouts from STF's for reference use.

### Other Products

As noted earlier, for an information packet on the user-defined areas tabulations, write or call Customer Services. For special tabulations of decennial data, contact either the Population Division (301-763-5476) or Housing and Household Economic Statistics Division (301-763-8553). Maps and other geographic products are discussed in chapter 4.

## SUMMARY

Data products from the 1990 census vary in terms of the data they present and the type or medium of the product. They include summary data in printed reports and machine-readable files, microfiche of reports and some data files, microdata on tape and CD-ROM, and special products created for specific users.

The type of product the user selects depends on many considerations, such as cost, convenience, timing, and data detail. For any particular product, users generally have a choice of ways to obtain it, ranging from buying it from the GPO or Census Bureau to using a copy at a nearby library or State Data Center organization.

For a better understanding of 1990 census products, users should be aware of the limitations of the data. Chapter 6 discusses such areas as sampling variability and nonsampling errors.

# CHAPTER 6.

## Understanding the Statistics

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### HOW TO GET THE MOST OUT OF THE DATA

How does one get the most out of the 1990 census data? The answer depends on many things—for instance, choosing appropriate subjects, defining suitable geographic areas, and finding a convenient format. This means putting to work the information found in the other chapters of this *Guide*.

Getting the most out of the data also depends on an understanding of the statistics—the focus of this chapter. Although this chapter cannot supply an academic knowledge of statistical theory, it is designed to offer practical insights or “tips” geared to a data user with a particular project in mind. It offers these thoughts in plain language, avoiding, where possible, undefined technical terms that could cause confusion. In fact, for census geography, this chapter occasionally uses popular terms at some cost in precision.<sup>1</sup> By contrast, it aims to present statistical ideas with enough precision and detail to help people use specific data tables or formulas to best advantage.

In presenting statistical ideas, this chapter often looks behind the surface of apparent contradictions—among different sets of data, for instance. In this way, the chapter answers questions that may occur to, and possibly concern, the reader in the course of preparing data for a project. These questions probe three major areas—census

<sup>1</sup>For example, this chapter may refer to townships when, in fact, the census covers all subdivisions of counties, both those that function as governments and those established for statistical purposes. Similarly, it may refer to cities or towns, when technically the census reports on every incorporated place and other (“census designated”) places of 2,500 persons or more. Again, many of the generalizations that apply to cities and towns also apply to county subdivisions in some States. They also may apply to Alaska Native and American Indian areas, including tribal jurisdiction statistical areas in Oklahoma, tribal designated statistical areas, and trust lands. Chapter 4 includes details about geographic entities. (The general term geographic “entities” is often used instead of “areas” in view of the variety of items covered by census geography and to avoid confusion with area measurements or territorial coverage.)

terms and explanations, sampling techniques, and other procedures that can affect the data. How does this chapter address these areas of interest?

First, the chapter shows how users can check census notes and definitions. Some definitions are new or revised for this census.

Second, this chapter covers estimates based on samples. The collection of sample data affords a much greater variety of information than the 100-percent count. However, users should treat with special caution data based on samples of areas or groups that have very few people or housing units. That caution would be needed with sample estimates from the Census Bureau or from any other statistical source. Here is an example of a possible problem in using estimates. Tables with estimates show only one number for each item (e.g., 350 households with an income from \$10,000 to \$12,444), but each number implies a probable count within a range of numbers (e.g., 340 to 360 households). When a range is too wide, the estimate can be quite inaccurate.<sup>2</sup>

This chapter shows how to determine the significance of estimates. It explains, step-by-step, how to use estimates with accuracy, understanding, and assurance.

Third, this chapter describes considerations other than sampling that could affect the data in a particular table. One consideration is the Census Bureau’s pledge to everyone who answers the questionnaire to keep the information confidential. Using a statistical method described later in this chapter, the Census Bureau is able to honor that pledge and also release more data faster than in earlier censuses.

Another consideration is the accuracy of the statistics. Accuracy is measured for various characteristics of the population and for the census count. Data projects in some instances could be affected by the undercount if they focus mainly on minorities, such as the Black and Hispanic populations. For most situations, the effect of the undercount would be smaller. Analysis of the Post Enumeration Survey (PES), as of August 1992, estimates that the 1990 census counted 98.4 percent of the population.

<sup>2</sup>This can happen, for instance, when two areas are compared. The areas may appear to have different rates of poverty, for example—say, 10 percent versus 15 percent. However, one should not automatically conclude that there is a 5-percent difference. For sample data, one must always allow for the possibility of error. The range of error depends on many things and might be any percentage. Suppose, for a very small population, a highly probable estimate is 7.6 percent over or under 5—in other words, from -2.6 to + 12.6 percent. That range is too wide because it includes zero. That means the apparent difference between estimates may have no significance.

That rate of accuracy in a census that enumerates a quarter of a billion people has led to a broad reliance on census data. Examples of the uses range from State health plans to metropolitan transportation programs. These uses cover studies of migration to the Southwest—and a housing analysis for a single ZIP Code. They include aging trends for the Nation and the need for meals-on-wheels in a specific neighborhood. A small business trying to grow may even need data about particular city blocks. Census data affect a myriad of society's decisions.

Moreover, the Census Bureau's concern for accuracy continues after the census. Statisticians document any inconsistencies with care.

## HOW TO KEEP UP WITH CORRECTIONS

The Census Bureau strives to maintain high quality and accurate data. Chapter 3 describes the wide array of methods used in designing the questionnaires and samples, in getting public cooperation, and in collecting and processing the data. Even so, some errors slip through. The agency reports on accuracy problems and tries to correct them as effectively as possible. For any corrections or other changes that might be needed, the staff issues a variety of notes.

### What Kinds of Notes Are Issued?

The notes are issued as part of the 1990 census products. These products include computer tapes, compact disc—read only memory (CD-ROM), and microfiche. Technical documentation accompanies each product. Notes also may apply to printed reports.

The Census Bureau issues *User Notes* and *Technical Notes*.

*User Notes* supplement information in the tables and explain problems with the data. They could refer to specific or general topics—a particular code misunderstood or a general characteristic misreported, for example. In addition, these notes would describe problems, if any, with geographic summaries.

*User Notes* appear as additions or as replacement pages for technical documentation. They also may correct or clarify appendixes in both technical documentation (before the appendixes) and printed reports (before the statistical tables). These notes may appear in products described in chapter 5, beginning with Summary Tape File (STF) 1 and 1990 CPH-1.

Other notes also are issued.

*Technical Notes* explain problems that apply only to computer tape files, including the header record content. Problems that apply to both reports and files appear in *User Notes*.

*Geographic Change Notes* report names and boundaries changed since the 1980 census or new for the 1990 census.

*Count Corrections Notes* show corrected census counts for population and housing units. They apply to both statistical areas and units of governments.

## How Are Corrections Obtained?

When problems are discovered *before* a product is issued, notes typically appear in the technical documentation or printed report they correct, change, or explain. Notes are also available *after* a product is issued.

People who purchase technical documentation directly from the Census Bureau automatically receive notes free by mail. Other users may request notes from Customer Services (Corrections), Bureau of the Census, Washington, DC 20233-8300.

Those who use the notes should be aware of how they are numbered. The numbers for notes correspond to the sequence of the products they correct. So the same note may be numbered differently in different products.

In addition to notes in reports and technical documentation, the agency issues corrections electronically. Users with modems can access corrections on personal computers via CENDATA™, the Census Bureau's online system.

Additional information will be available over the years. For example, population estimates for 1991 and later years will be published in the *Current Population Reports* P-25 and P-26 series. These reports also will reflect information from the notes on the 1990 census.

But what if the problem is subtler than the correction of a number? What if the problem is a misunderstanding? Then, the solution may depend on a definition.

## HOW A DEFINITION CAN BE CRUCIAL

Finding the right definition can be vital for any kind of technical information—statistical or otherwise—needed for a project. Distinctions can be far from obvious—for example, household income may be easily confused with family income. Such terms as “employment status” include data on unemployment—the opposite of what one might expect. Ordinary terms can have technical meanings. “Housing” is an ordinary word; what the Census Bureau includes in the concept is complex. Misunderstanding may be more of a hindrance than any error. However, the agency provides specific explanations. They are easy to find.

### Where Can One Find Explanations?

The 1990 census Glossary (Part B of this *Guide*) will define and explain most census terms. Other 1990 census products supply definitions, too. In printed reports and documentation, geographic and subject definitions appear in appendixes A and B, respectively.

Each subject definition has two parts, if appropriate, called "Limitation of the Data" and "Comparability." The former offers cautions in the use of the data. The latter describes any changes in the wording of the question or the response categories. These may directly affect the kinds of statements that can be made about changes in the data between the 1980 and 1990 censuses. Changes in wording apply to such topics as education, disability, and the number of housing units in a structure. (For further information on census questions, see ch. 2.)

The 1990 Census of Population and Housing History will supply more perspective. It will explain in detail how the Census Bureau asked, classified, edited, and processed each question. It will be published after most of the files and reports with statistical tables have been issued.

**How Can One Misread a Table?**

Often what seems like a mistake is not.

Figure 6-1 appears in the 1980 census subject report *Journey to Work: Metropolitan Commuting Flows*, PC80(2)-6D. The column shows the number of people working in the San Diego metropolitan area and living somewhere else. Notice the data seem to show 166 people commuting to San Diego from Tennessee—141 from Shelby County alone—to say nothing of hundreds of other sturdy, trans-continental "commuters." They seem to fly in daily from New York, Connecticut, and a perhaps exotic "elsewhere."

Did all those people fill out their questionnaires wrong? Not likely. Actually, the question read: "At what location did this person work last week?" (A similar question is listed as item 22 of the 1990 questionnaire.) So they may have been on business trips the previous week or may have just moved to San Diego. The table counts them with commuters.

How should one deal with such puzzles? The easiest way for many will be to refer to the definition and explanation in the alphabetical Glossary, planned as a supplement to this *Guide*. Until then, one may check the topic needed in the index of this *Guide*. In this case, it leads to chapter 2 and to a discussion of the actual question asked in the census. Also, the appendixes of data reports and the technical documentation include definitions. In addition, a copy of the 1990 Census Questionnaire appears at the end of chapter 2 for reference. A reference to the question itself can sometimes pinpoint which data the census cannot possibly yield—if one remembers that data from questions are often cross tabulated. In addition, one may address questions about the data to the Bureau of the Census.

Any of these methods could have answered questions about the table on commuting. The questions it raised illustrate, again, that inconsistencies often are apparent rather than real.

**How Can One Misinterpret a Street Scene?**

Again, sometimes the data don't seem to match what people see from the street. Take housing data. Of course,

Figure 6-1. Illustration of Data Sometimes Misread

**Place of Work: 1980—Con.**

[1980 data are estimates based on a sample. The 1980 report discussed the sample, symbols, and definitions]

SMSA's Residence and Place of Work	Workers 16 years and over
SAN DIEGO, CALIF., SMSA—Con.	
Living in SMSA—Con.	
Worked outside SMSA—Con.	
Mexico .....	890
Elsewhere .....	29 381
Not reported .....	63 162
Worked in SMSA .....	756 356
Living in SMSA .....	744 771
California .....	744 771
San Diego County .....	744 771
Carlsbad city .....	13 987
Chula Vista city .....	32 272
El Cajon city .....	29 263
Escondido city .....	24 196
La Mesa city .....	21 602
National City city .....	12 841
Oceanside city .....	28 699
San Diego city .....	360 142
Vista city .....	13 332
Remainder of county .....	208 437
Living outside SMSA .....	11 585
Arizona .....	104
California .....	8 354
Alameda County .....	169
Alameda city .....	105
Los Angeles County .....	1 783
Inglewood city .....	112
Long Beach city .....	108
Los Angeles city .....	482
Orange County .....	3 401
Anaheim city .....	256
Garden Grove city .....	101
Huntington Beach city .....	152
Orange city .....	107
San Clemente city .....	1 462
Riverside County .....	830
San Bernardino County .....	600
Santa Barbara County .....	177
Santa Clara County .....	156
Ventura County .....	219
Colorado .....	106
Connecticut .....	132
Illinois .....	289
Mississippi .....	123
New York .....	143
Tennessee .....	166
Shelby County .....	141
Texas .....	257
Virginia .....	165
Washington .....	272
Elsewhere .....	1 474

some homes get built or torn down after Census Day. More often, it's a problem with a census definition—and the way it affects data collection. One might see only a store and a single house from the street. But people may live over a store or behind one, or they may live in a converted garage or trailer behind a house. That could confuse someone

trying to figure out how the Census Bureau got its results for a city block. Often the definition answers the question. It can explain what the Census Bureau does and doesn't count:

1. The census counts the housing units, not just the number of residential buildings. A person looking at a building may not realize that half a dozen units are inside.
2. The census would classify recreational vehicles, tents, and boats as housing units if someone usually lives there.
3. The census doesn't count some houses. It excludes those still under construction, burned out, condemned, or with the inside exposed to the elements on Census Day.
4. The census also excludes group quarters from the count of housing units. (Examples of group quarters include most rooming houses, communes, college dormitories, and nursing homes.)

It's easy to solve the misunderstandings discussed up to now. One can check the Glossary or one of the other sources mentioned. Another problem goes deeper—the question of estimates.

## HOW TO USE ESTIMATES

The use of estimates is crucial to the operation of our social and economic institutions. Their value to many projects is greater than any 100-percent counts, which cover fewer subjects.

However, data users should not regard estimates as if they were counts. One easily can see the difference between the two. Simply compare the data for subjects and geographic areas in a sample data report with those from a complete count report. They will usually differ, though often very slightly.

The difference can be greater than it might seem from simply scanning the tables. Why? When a 100-percent count table shows "5 households," it means "5 households." When a sample data table shows "5," it means that there is a range of possible figures (perhaps from 4 to 6) that may be true—and that the average within that range is "5 households."

Fortunately, data users can determine how reliable a set of statistics is. They can even set their own "confidence level." That means they can use numbers they trust to correspond to an actual count a certain percentage of the time. They can set the confidence level high. For example, they may choose a range that would include the count 95 times out of 100. This is setting a confidence level of 95 percent. The section below explains how to do this. But first one needs to ask if it is necessary to use estimates at all.

## Should One Use Sample or 100-Percent Data for a Subject?

Generally, if a user is interested in data on a 100-percent count subject, such as age, race, or tenure, it is best to use 100-percent (sometimes called "complete-count") data. That's true even though those same subjects can appear in reports and files with data from the sample only. The reason? As a rule, the 100-percent count data are more reliable. Sample results almost always differ from those a 100-percent count would give. That applies even if the questions, instructions, and enumerators had been the same.

Samples also have the same kinds of errors as the 100-percent count from which they are drawn. These include errors in response, reporting, and processing.

## How Does the Census Bureau Estimate the Total Population From a Sample?

The statistical weight one gives to the data depends on the plan used to draw the sample. If half the people are sampled, then one could multiply by 2 to get an estimate for the total population. That number—the number by which one multiplies—is called the "sample weight." So the sample weight is 2 in this example.<sup>3</sup>

For the 1990 census, on the average 1 out of 6 housing units received a sample questionnaire. The Bureau of the Census sampled housing units in areas with small populations at a rate of 1-in-2. Other areas were sampled at 1-in-8. However, the majority of the country was sampled at 1-in-6. (For more information about sampling size, see "Sampling Techniques" under "Questionnaire Design and Use" in ch. 3 of this *Guide*.)

However, the statisticians do not use weights of 2, 6, and 8 for every area. For example, its rules might require a sample of 1-in-6 for half the population of a county but 1-in-8 for the other half. In that case, the overall average weight for the county would be about 7. Using varying weights, the Census Bureau determines the estimates for specific areas or groups of people.

In this way, it compensates to reduce "sampling variability." In other words, it narrows the range between the lowest and highest probable estimate. Put another way, it makes the estimate vary less from a 100-percent count of every person. (A more detailed explanation for sample data products appears in appendix C of the technical documentation (for computer files) and of the 1990 printed reports.)

<sup>3</sup>This passage aims to suggest the general idea of weighting, not the complexity of the actual estimation technique used in the 1990 census. The 1990 census ratio estimation technique, commonly known as "raking," is very complex. For information on the estimation methodology, refer to Appendix C, Accuracy of the Data, in any of the sample data products. The Census Bureau applies the resulting formulas to totals for demographic and housing characteristics. This technique reduces "standard errors" and statistical "bias," described later in this chapter.

**Figure 6–2. Population Differences Between 100-Percent and Sample Data for Census Tracts**

*[Illustrative data]*

	Redwood City								Balance of Rollings County			
	Tract 38	Tract 39	Tract 40.01	Tract 40.02	Tract 40.03	Tract 41	Tract 42p <sup>1</sup>	Tract 43	Tract 17	Tract 18	Tract 42p <sup>1</sup>	Tract 44
100-percent count data . . . . .	3,420	5,957	21	3,099	2,502	4,818	106	3,356	3,682	3,248	2,621	1,718
Sample data . . . . .	3,420	5,957	–	3,120	2,502	4,853	71	3,356	3,626	3,304	2,621	1,718

<sup>1</sup>The “p” refers to part of a census tract that is split by the boundary of an incorporated (or other) place.

**Why Do Samples Only Occasionally Match 100-Percent Counts?**

Why do sample data often differ from 100-percent—even if only slightly?

Generally, this difference occurs only within parts of “sample weighting areas.” Sometimes sample weighting areas are census tracts. To serve as a sample weighting area, a census tract must have at least 400 sample persons. If not, the Census Bureau combines this census tract with another to create a sample weighting area. The sample data won’t match the census 100-percent count exactly for either census tract, but they will match when data for the two census tracts are added. Such differences show up whenever a geographic area differs from a sample weighting area.

Sample weighting areas are unique—they do not overlap each other and they do not cut across certain political boundaries, such as counties or States. However, sample weighting boundaries can cut across some other statistical boundaries. (These include “census county divisions,” “block numbering areas,” and “block groups”; ch. 4 defines each term.)

Sample data on population may not match sample data on housing for every subject item or geographic area. Why? Because weights for population and housing estimates are determined by independent, though corresponding, estimation techniques.

Differences between sample and 100-percent count data may surprise new users. Matching numbers may surprise the experienced.

Specific tables illustrate these concerns.

*Population and Housing Characteristics for Census Tracts and Block Numbering Areas* (CPH-3) provides an example of 100-percent and sample data.

This chapter provides two imaginary illustrations. Figures 6–2 and 6–3 show how complete counts might differ from sample data in some areas in the 1990 census results. Notice the difference in figure 6–2 between data for tracts 40.01 and 40.02. Add the 100-percent counts for 40.01 to 40.02. Do the same for the sample data there. The sample total matches the count. The same thing happens when one adds tract 41 to part (“p”) of tract 42, in Redwood City.

For tract 44, the sample and 100-percent count figures match. Why? Maybe chance or maybe the census tract coincides with a place of fewer than 2,500 people. In such a case, it was sampled at 1-in-2 and was itself a sample

weighting area. Census tracts 17 and 18 illustrate another situation. Both add up to 6,930, even though their populations, each over 2,500, suggest that they need not have been combined into the same sample weighting area. However, there may be a small incorporated place in either census tract that constituted a separate sample weighting area. That would have forced the remainder of the census tract to be combined with the other tract.

Sample data from these areas usually differ from 100-percent counts, as in figure 6–3. Normally, this difference is within the range of “sampling variability.” A little later on, this chapter discusses that phrase. But first one should consider a basic principle—that samples vary.

**HOW SAMPLES VARY**

Sample results are just estimates of what a 100-percent count would have shown. So it is likely the sample data will be somewhat different from the count.

How much will a sample estimate differ from the 100-percent count? It varies. Knowing about this “sampling variability” helps one understand how much confidence to put in the data. As noted earlier, one can put more confidence in estimates for areas with large numbers than small. Suppose one finds a family poverty rate estimate of 15 percent. How close would that be to a 100-percent count figure? In a city or State of several million people, it might be within one-tenth of 1 percent. In a census tract of a few thousand people, the estimate might be off by a sizable percentage of the total. So caution should be used with this estimate.

**Figure 6–3. Population Differences Between 100-Percent and Sample Data for Census County Divisions**

*[Illustrative data]*

	100-percent count	Sample estimate
<b>Franklin County . . . . .</b>	21,356	21,356
Ashland division . . . . .	397	485
Crowell division . . . . .	3,546	3,448
Douglas division . . . . .	10,432	10,446
Douglas city . . . . .	9,982	9,982
Durham division . . . . .	1,651	1,709
Greenville division . . . . .	2,279	2,114
Greenville town . . . . .	676	709
Halcott division . . . . .	199	114
Lexington division . . . . .	1,662	1,690
Lexington city . . . . .	1,201	1,201
Withers division . . . . .	1,190	1,350
Withers town . . . . .	471	438

## What Do “Standard Errors” Imply for the User?

How can one estimate the size of the error from the size of the sample? One can do that by using the “standard error” that applies to the specific area and characteristics one has in mind. It’s a number from a formula discussed later in the chapter. This chapter typically refers to the standard error as the average error that arises from taking a sample instead of a count. Technically, in statistical theory, standard error is slightly different—the average error coming from all possible samples.

Because the standard error is so important, virtually every census report with estimates includes the information needed to calculate it.

The standard error is based on one fact: Chance errors follow patterns. These patterns let one approximate how much an estimate will differ from the 100-percent count.

Statisticians use phrases like “standard error” to describe such patterns. A single standard error implies a range of figures that will be, as statisticians have learned, accurate 2 out of 3 times. For example, suppose an estimate is 50 and the standard error is plus or minus 5, that is, from 45 to 55. That means 2 out of 3 times the actual count (50) would be within the limits of confidence intervals (45-55) constructed this way. (In other words, 2 times in 3, the confidence intervals constructed in this way would contain the actual 100-percent count.) By contrast, 2 standard errors describe a range (plus or minus 10, or 40-60, in this example) which would match the 100-percent count more often—in about 19 out of 20 cases. Two and a half standard errors would equal 2 1/2 times 5 in this example, or plus or minus 12 1/2. The span, then, would be 37 1/2 - 62 1/2. Statisticians have learned that a confidence interval range of 2 1/2 standard errors would include the actual count 99 times out of 100. Converted to percentages, the probability of 2 out of 3, 19 out of 20, and 99 out of 100 are about 67, 95, and 99 percent. So depending on whether the user employs 1, 2, or 2 1/2 standard errors, the estimates would tend to match counts about 67, 95, or 99 percent of the time.

Does this show how much the estimate may vary from the “true value”—that is, the actual number of people, for instance? No, it shows the possible variation from the *census count*. Other kinds of errors can distort both counts and estimates. Both may suffer from errors in coverage, processing, and other forms of nonsampling error (“statistical bias,” for instance) discussed in the following section. A distinction between the true value and the count may affect projects focused on minorities. As a rule, it would affect other projects less.

However, the principles for using estimates are similar for all populations and all sources of statistics.

## How Confident Should One Be of an Estimate?

One can put more confidence in an estimate that allows for a wide range of possible results. A narrow range might be preferable, but the chance that it would be accurate

might be slim. Take an example from ordinary life. If 12 people are invited to a party, it’s more likely that between 8 and 11 will accept than that the figure will be exactly 9.

Actually, one can determine the degree of confidence needed. This is called “defining the confidence interval” by specifying the number of standard errors (or “s.e.”).

- A 67-percent confidence interval ranges from 1 standard error below the estimate to 1 above it. One can say this another way: “ $\pm 1$  s.e.” or plus or minus 1 standard error.
- A 95-percent confidence interval ranges from 2 standard errors below the estimate to 2 above it—in other words, “ $\pm 2$  s.e.”
- A 99-percent confidence interval ranges from 2 1/2 standard errors below the estimate to 2 1/2 above it, “ $\pm 2 \frac{1}{2}$  s.e.”

With an estimate of 1,000 and a standard error of 70, a 67-percent confidence interval ranges from 930 to 1,070. Of course, one still takes a 33-percent chance that the number being estimated will actually go below 930 or above 1,070. That would fall outside the 67-percent confidence interval. So frequently people choose a more conservative interval. A 95-percent confidence interval gives 860 to 1,140 [ $1,000 (\pm 2 \times 70)$ ].

Compensating for the standard errors may be insufficient; some subjects and calculations are more vulnerable to errors than others. (Such errors differ from the sampling errors discussed here. Called “nonsampling errors,” they are discussed later in the chapter.)

## What Should One Consider In Estimating a Standard Error?

What makes an error large or small? It hinges on the standard error and other concerns. Specifically, error can depend on—

1. the size of the estimated number
2. the size of the sample it comes from
3. the subject (e.g., poverty)—some subjects are more likely than others to be in error, thus affecting estimates as well as counts
4. the estimation process

The illustrations in this chapter cover these points. Specifically, the tables and formulas in figures 6-4, 6-5, and 6-6 address each of the four items above. Figure 6-4

**Figure 6–4. Unadjusted Standard Error for Estimated Totals**

[1990 data. Based on a 1-in-6 simple random sample]

Estimated Total	Size of publication area													
	500	1,000	2,500	5,000	10,000	25,000	50,000	100,000	250,000	500,000	1,000,000	5,000,000	10,000,000	25,000,000
50 <sup>1</sup> .....	16	16	16	16	16	16	16	16	16	16	16	16	16	16
100 .....	20	21	22	22	22	22	22	22	22	22	22	22	22	22
250 .....	25	30	35	35	35	35	35	35	35	35	35	35	35	35
500 .....	-	35	45	45	50	50	50	50	50	50	50	50	50	50
1,000 .....	-	-	55	65	65	70	70	70	70	70	70	70	70	70
2,500 .....	-	-	-	80	95	110	110	110	110	110	110	110	110	110
5,000 .....	-	-	-	-	110	140	150	150	160	160	160	160	160	160
10,000 .....	-	-	-	-	-	170	200	210	220	220	220	220	220	220
15,000 .....	-	-	-	-	-	170	230	250	270	270	270	270	270	270
25,000 .....	-	-	-	-	-	-	250	310	340	350	350	350	350	350
75,000 .....	-	-	-	-	-	-	-	310	510	570	590	610	610	610
100,000 .....	-	-	-	-	-	-	-	-	550	630	670	700	700	710
250,000 .....	-	-	-	-	-	-	-	-	-	790	970	1 090	1 100	1 100
500,000 .....	-	-	-	-	-	-	-	-	-	-	1 120	1 500	1 540	1 570
1,000,000 .....	-	-	-	-	-	-	-	-	-	-	-	2 000	2 120	2 190
5,000,000 .....	-	-	-	-	-	-	-	-	-	-	-	-	3 540	4 470
10,000,000 .....	-	-	-	-	-	-	-	-	-	-	-	-	-	5 480

<sup>1</sup>The standard error shown may be applied to any number from 0 through 50.

<sup>2</sup>The total count of persons in the area if the estimated total is a personal characteristic, or the total count of housing units in the area if the estimated total is a housing unit characteristic.

**Figure 6–5. Unadjusted Standard Error in Percentage Points for Estimated Percentage**

[1990 data. Based on a 1-in-6 simple random sample]

Estimated Percentage	Base of percentage													
	500	750	1,000	1,500	2,500	5,000	7,500	10,000	25,000	50,000	100,000	250,000	500,000	
2 or 98 <sup>1</sup> .....	1.4	1.1	1.0	0.8	0.6	0.4	0.4	0.3	0.2	0.1	0.1	0.1	0.1	
5 or 95 .....	2.2	1.8	1.5	1.3	1.0	0.7	0.6	0.5	0.3	0.2	0.2	0.1	0.1	
10 or 90 .....	3.0	2.4	2.1	1.7	1.3	0.9	0.8	0.7	0.4	0.3	0.2	0.1	0.1	
15 or 85 .....	3.6	2.9	2.5	2.1	1.6	1.1	0.9	0.8	0.5	0.4	0.3	0.2	0.1	
20 or 80 .....	4.0	3.3	2.8	2.3	1.8	1.3	1.0	0.9	0.6	0.4	0.3	0.2	0.1	
25 or 75 .....	4.3	3.5	3.1	2.5	1.9	1.4	1.1	1.0	0.6	0.4	0.3	0.2	0.1	
30 or 70 .....	4.6	3.7	3.2	2.6	2.0	1.4	1.2	1.0	0.6	0.5	0.3	0.2	0.1	
35 or 65 .....	4.8	3.9	3.4	2.8	2.1	1.5	1.2	1.1	0.7	0.5	0.3	0.2	0.2	
50 .....	5.0	4.1	3.5	2.9	2.2	1.6	1.3	1.1	0.7	0.5	0.4	0.2	0.2	

<sup>1</sup>The percentages may range from 0 through 2 and from 98 through 100.

deals with the effect of size (points 1 and 2) on a standard error. In this case, in an area of 2,500 an estimated number of 100 has a standard error of 22—more than one-fifth of the total. By contrast, in an area of 1,000,000 people an estimated number of 100,000 has a relatively tiny standard error of 670. Figure 6–5 tells a similar story in percentages.

Figure 6–6 shows how different characteristics are subject to varying standard errors (point 3). The numbers shown in figure 6–6 are considerations (called “design factors”) to be used in estimating standard errors. The factors vary from characteristic to characteristic. Although the percentages are imaginary, they illustrate that fact. For example, in the first column the standard design factor for school enrollment (at 0.8) is smaller than for race (at 1.6). Much less evident, but equally true, figure 6–6 also shows the effect of the estimation process (point 4).

One way to understand the variations in figure 6–6 is to keep in mind that certain characteristics are usually shared

by entire households. Any errors for such characteristics can multiply (or, as statisticians sometimes say, “cluster”). Such traits as race and residence in 1985 are important examples. These insights into standard errors lead to the reliable use of data based on sample estimates.

**How Can One Find How Reliable an Estimate Is?**

A few basic steps show how to determine the level of confidence. It is also called defining a confidence interval, using either tables or formulas. This chapter explains both methods. It considers the tables first, the formulas next.

For the tables, turn to appendix C in the printed reports or refer to the documentation for the summary tapes. Figures 6–4 through 6–6 duplicate or illustrate these tables.

1. Find the unadjusted standard error in figure 6-4 or 6-5, choosing the row for the estimated total or percent.
  - a. If the estimate is a number (not a percent), use figure 6-4. Choose the column with the total number of people, families, or housing units in the area.
  - b. If the estimate is a percent, use figure 6-5. Choose the column using the base (the denominator) of the percentage.
  - c. In either figure, check the row that estimates the size of the group of interest (e.g., college graduates) within the area.
  - d. If the totals in the rows or columns seem very different, approximate between them.
2. Determine the standard error design factor.
  - a. Find the sampling rate for the geographic area in figure 6-7. (Information on the percent in sample, by area, appears in printed reports after the statistical tables. For similar information for summary tape files, see the "data matrix" for the tabulation area in the technical documentation.)
  - b. Find the standard error design factor in figure 6-6 using the sampling rate from step 2a to choose the column. Suppose more than one of the subjects listed applies. Look up each factor and use the largest.
3. Figure the adjusted standard error. Multiply the unadjusted standard error (from step 1) times the standard error adjustment factor (from 2b).
4. Determine a confidence level. For the 95-percent confidence interval, multiply the standard error ("s.e.") times 2. Then subtract that amount (-2 s.e.) from the estimate for the lowest number. Finally, add it (+ 2 s.e.) to the estimate to get the top of the confidence interval.

### How Does It Work in Practice?

To illustrate, assume the census tract report is for the Abbeyville MSA. Suppose census tract 18.01 shows 247 women in the labor force with children under 6 years old. Figure 6-7 shows it had a population of 5,021. But, how many of these women are really likely to be in that area—at most and at least?

1. In figure 6-4, choose the fourth column for a population of about 5,000. Use the third row for an estimate close to 250. This gives a standard error of 35. Since the numbers in the table approximate the numbers one has, one can simply use 35.
2. (a) In figure 6-7, the sampling rate for tract 18.01 shows 17 percent.  
 (b) In figure 6-6, for a sampling rate of 17 percent, the second column applies. (It covers all rates 15 to less than 30 percent.) From this column, find the factor 0.8 for employment status. Since the figure shows no factors for sex and presence of children, they cannot be used in this calculation. So use 0.8 as the standard error adjustment factor.

Figure 6-6. Standard Error Design Factors

[Illustrative data]

Population Subjects	Percent in sample			
	Less than 15	Mixed sample areas <sup>1</sup>		45 or more
		15 to less than 30	30 to less than 45	
Race .....	1.6	1.4	1.0	0.7
Spanish origin .....	1.5	1.3	0.9	0.7
Age .....	0.8	0.7	0.5	0.4
Household relationship .....	0.5	0.4	0.3	0.2
Family composition .....	0.6	0.5	0.4	0.3
Ancestry .....	1.4	1.3	0.9	0.6
School enrollment .....	0.8	0.7	0.5	0.4
Years of school completed .....	1.0	0.9	0.6	0.4
Residence in 1985 .....	2.5	2.2	1.5	1.2
Employment status .....	0.8	0.8	0.5	0.4
Place of work .....	1.6	1.5	1.0	0.7
Means of transportation to work .....	1.1	1.0	0.7	0.5
Occupation .....	1.1	1.0	0.7	0.5
Industry .....	1.1	1.0	0.7	0.5
Class of worker .....	1.1	1.0	0.7	0.5
Income—persons .....	1.0	0.9	0.6	0.4
—families .....	1.0	0.9	0.6	0.4
Poverty status—persons .....	1.9	1.7	1.2	0.8
—families .....	1.0	0.9	0.6	0.4

<sup>1</sup>The Census Bureau took only three samples for any small area: 12 1/2, 16 2/3, and 50 percent. Because it mixed these samples in such areas as counties, the average varied.

Figure 6-7. **Sampling Rate for the Metropolitan Areas, Counties, Places of 10,000 or More, and Census Tracts**

[Illustrative data]

	Persons	
	100-percent count	Percent in sample
Abbeyville MSA .....	115,322	22.0
Calder County .....	86,042	18.4
Abbeyville .....	58,452	16.9
Tract 1 .....	4,034	16.4
Tract 2 .....	6,252	17.1
Tract 3 .....	3,689	16.8
~~~~~		
Tract 18.01 .....	5,021	17.0
Tract 18.02 .....	6,120	16.7
Tract 19 .....	2,998	16.6
Dorchester Heights .....	10,658	16.9
Tract 8 .....	4,982	17.8
Tract 9 .....	3,861	16.6
Tract 13p .....	1,815	14.8
Remainder of county .....	16,932	24.6
Tract 10 .....	2,380	44.9
Tract 11 .....	4,401	16.6

- The estimated standard error for 247 women in the labor force with children under 6 years old is  $35 \times 0.8 = 28$ .
- The 95-percent confidence interval of this estimate of 247 is 191 to 303. Here's why: The 95-percent interval means 2 standard errors or  $2 \times 28 = 56$ ;  $247 - 56 = 191$ ; and  $247 + 56 = 303$ . So the odds are 19 out of 20 that a 100-percent count question would have this result. In census tract 18.01, probably between 191 and 303 women in the labor force had children under 6.

While tables are useful, must one always depend on them?

**Can One Find a Standard Error With a Calculator?**

Figures like 6-4 and 6-5 can help in estimating standard errors. Yet one still may have to calculate for numbers in between those given. So it can be simpler to apply a formula to a calculator, using the square root key.

Table 6-4 came from this formula:

$$(1) \quad s.e. A = \sqrt{5A \text{ \$1 } \$ A \text{ \$N\$}}$$

A is the estimated number, and N equals the number of persons, families, or housing units in the area.

For example, to determine the unadjusted standard error for an estimate of 247 persons (A = 247) in an area with 5,021 inhabitants (N = 5,021), the computation is:

$$(2) \quad s.e._{247} = \sqrt{5 \times 247 \times \$1 \text{ } \$ 247 \$ 5021 \$}$$

$$\sqrt{1174.25} = 34.3$$

This approximates the 35 in figure 6-4 which is the unadjusted standard error of an estimate of 250 among 5,000 people.

Standard errors for our tape products can be easily calculated and programmed for computers. Standard error design factors like those on figure 6-6 come with the tape documentation (*User Note*) and printed reports.

$$(3) \quad s.e. p = \$ \frac{5P \text{ } \$100 \text{ } \$P\$}{B}$$

B is the base of the proportion (i.e.,  $P = X / B \times 100$ )

An unadjusted standard error of 15 percent (P = 15) with a base of 1,243 (B = 1,243) works out this way:

$$(4) \quad s.e._{15\%} = \$ \frac{5 \times 15 \times \$100 \text{ } \$ 15\$}{1243}$$

$$\sqrt{5.1} = 2.3 \text{ percent}$$

Then the 95-percent interval equals 15 percent plus or minus 4.6 percent. That means 10.4 to 19.6 percent.

The standard errors these formulas yield look very precise carried to several decimal places. Yet they are only estimates. So consider rounding the answer to no more than two decimal digits after the first zero(s). For example, .0528 rounds to .053.

**How Can Reliability Affect Project Plans?**

Assume a community service organization plans to set up day-care centers in the Abbeyville metropolitan statistical area (MSA). Each would serve the children of every 50 women.

The organization should not assume that a figure of 247 would mean exactly five centers are needed. With the confidence interval in mind, they should recognize that from 191 to 303 such women lived there, needing between four and six centers. (In practice, calculations would probably include other refinements, such as specific "childbearing" ages. Presumably the organization would do further research—for example, its own sample survey—to add new information, such as how many people intended to use the centers, then decide on the actual number of centers.)

Figure 6-8 also shows how sampling variability affects census estimates; in this case, counts of people by occupation. For each area, the table shows the estimate, a 95-percent confidence interval, and a "coefficient of variation." That coefficient expresses the standard error as a percentage of the estimate and is a useful measure of precision. The table makes it clear that data for large counties cover most kinds of jobs quite accurately.

Figure 6–8. Confidence Intervals for Estimates at Different Levels

[Illustrative data]

	Large county Average sampling rate = 20 percent			Census tract Sampling rate = 16 2/3 percent			Small city Sampling rate = 50 percent		
	Census estimate	95-percent confidence interval	Coefficient of variation <sup>1</sup> (percent)	Census estimate	95-percent confidence interval	Coefficient of variation <sup>1</sup> (percent)	Census estimate	95-percent confidence interval	Coefficient of variation <sup>1</sup> (percent)
<b>Total population</b> .....	<b>455,021</b>			<b>2,108</b>			<b>2,108</b>		
Total employed, 16 years and over .....	163,556	162,408 - 164,714	.4	749	671 - 827	5.2	749	710 - 788	2.6
Managerial and professional specialty occupations .....	65,753	64,586 - 66,920	.9	299	220 - 378	13.2	299	263 - 335	6.0
Executive, administrative, and managerial .....	22,928	22,202 - 23,654	1.6	107	57 - 157	23.4	107	84 - 130	10.7
Professional specialties .....	42,825	41,856 - 43,794	1.1	192	127 - 257	16.9	192	162 - 222	7.8
Technical, sales, and administrative support .....	57,317	56,216 - 58,418	1.0	336	253 - 419	12.4	336	298 - 374	5.7
Technicians and related support occupations ..	6,001	5,622 - 6,380	3.2	64	25 - 103	30.5	64	46 - 82	14.0
Sales occupations .....	13,195	12,638 - 13,752	2.1	78	35 - 121	27.6	78	59 - 97	12.2
Administrative support, including clerical .....	38,121	37,202 - 39,040	1.2	194	129 - 259	16.8	194	164 - 224	7.7
Service occupations .....	13,583	↙13,018 - 14,148	↙2.1	↙37	↙2 - 72	↙47.3	37	21 - 53	21.6
Private household .....	1,495	1,305 - 1,685	6.4	–	0 - 35	*	–	0 - 16	*
Protective service .....	2,646	2,394 - 2,898	4.8	10	1 - 45	175.0	10	1 - 26	80.0
Service, except protective and household .....	9,442	8,969 - 9,915	2.5	27	1 - 62	64.8	27	11 - 43	29.6
Farming, forestry, and fishing occupations .....	345	254 - 436	13.2	–	0 - 35	*	–	0 - 16	*
Precision production, craft, and repair occupations .....	15,841	15,233 - 16,449	1.9	55	19 - 91	32.7	55	39 - 71	14.5
Operators, fabricators, and laborers .....	10,717	10,214 - 11,220	2.3	22	1 - 57	79.5	22	6 - 30	36.4
Machine operators, assemblers, and inspectors .....	4,454	4,127 - 4,781	3.7	6	1 - 41	291.2	6	1 - 22	133.0
Transportation and material moving occupations .....	3,378	3,093 - 3,663	4.2	–	0 - 35	*	–	0 - 16	*
Handlers, equipment cleaners, helpers and laborers .....	2,885	2,622 - 3,148	4.6	16	1 - 51	109.4	16	1 - 32	50.0

\* Not derivable.

<sup>1</sup>For the “coefficient of variation,” divide the standard error by the estimate.

Compare that with census tracts with only 1-in-6 samples in 1980. Take persons in “service occupations.” Large counties show a coefficient of variation of only 2.1 percent. Double that for the 95-percent confidence interval (2 standard errors above and below the estimate). That gives a plus or minus 4.2 percent range around the 13,583 figure. So column 2 shows chances are 95 out of 100 that the county has from 13,018 to 14,148 service workers.<sup>4</sup>

Now look at service workers in census tracts. They show a 47.3-percent variation. Again, double the figure for a 95-percent confidence level. This equals plus or minus 94.6 percent around the 37 figure. That could mean any number between 2 and 72 people. (Actually, the same point could be made with any population group—college graduates, for example. Estimates for small groups within small areas are subject to important variations.)

How can one get more precision? First, add census tracts or other areas together. That will mean larger figures, and larger figures provide more reliable results. For

example, planners can combine some census tracts to form a city service area. Then they would check related subjects to get additional and more precise counts. In the day-care example, a 100-percent count of all children could supplement the estimate of working mothers.

### How Much Does Sample Size Affect Reliability?

The last example shows a sample of 1-in-6 or 16 2/3 percent. Samples of 1-in-2 (50 percent) can cut those standard errors by more than half. The 50-percent samples apply to certain governmental units, such as counties, cities, towns, or townships with fewer than 2,500 people. See figure 6–6 for the contrast.

The first column—for the heading “less than 15” (percent in sample)—can apply to samples of 1-in-8. The last column—for “45 percent or more”—can apply to samples of 1-in-2. For a subject like race (the first item listed) the adjustment factor is more than twice as high for the smaller sample—1.6 versus 0.7. Figure 6–8 makes the contrast even sharper by showing areas of very different sizes. It includes thickly populated counties and mere census tracts. For the first characteristic listed, the total number of people employed, the variation is only 0.4 percent

<sup>4</sup>Percentages in the table are rounded. Calculated from the plus or minus 4.2 range, the results are slightly different—13,012 to 14,155.

for a large county but more than 10 times higher (5.2 percent) for a census tract—even though the sampling rate in each is about the same—20 percent versus 16 2/3 percent.

Some areas mix the samples. A county might have some towns or other governmental units under and others over 2,500 people, as well as areas not in any incorporated (or other) place. It's perfectly acceptable to use mixed samples. The results will be more reliable than smaller samples, less reliable than larger ones. Figure 6-7 shows the effect of mixing samples. Notice that the percent sampled varies from one area to the next—for example, 22 percent in the metropolitan area but only 16.9 percent in one city.

What if one cuts sample size? Can one limit the effect? Yes, the Census Bureau did just that in this census.

In the 1990 census, sampling for the country (in round numbers) averaged 17 percent—down from 19 percent in 1980. To reduce the effect on the data, the statisticians used smaller samples only in the larger areas. These “larger areas” included populous census tracts in counties, towns, and townships with an estimated number of housing units of 2,000 or more. The Census Bureau sampled at a 1-in-8 rate there. That's down from 1-in-6 in 1980. (It sampled most of the rest of the country, where most (3 out of 5) people live, just as in 1980—at 1-in-6.)

Where did the population estimates needed to select these areas come from? The Census Bureau made them before the census. (For more details on sampling, see ch. 3 of this *Guide*.)

However sound their sources and however accurate their computations, data users, nevertheless, must ask whether the data actually have any meaning for their purposes.

But how, specifically, can a user test the data for significance?

### When Is a Distinction a Real Difference?

When do differences in estimates mean something? When do they just arise from random chance? Suppose a number or percentage applies to two geographic areas (A and B). This formula approximates the standard error arising from chance:

$$(5) \quad \text{s.e.}_{A \& B} = \sqrt{\text{s.e.}_A^2 + \text{s.e.}_B^2}$$

Example: Assume that the census data for one census tract shows a 15-percent poverty rate for families, and that another tract reveals a 10-percent poverty rate. The 100-percent count of families is 1,234 for the first tract and 498 for the second. For both, the sampling rate was 1-in-6. Yet would a 100-percent count have shown any difference?

Find the standard error for both numbers. Formula (4) above shows that the unadjusted standard error for 15 percent of 1,234 is 2.3 percent. Figure 6-6 gives 1.0 as

the adjustment factor for the poverty status of families. The standard error equals 2.3 percent. Figure 6-5 approximates the standard error of 10 percent of 500 families at 3.0 percent. The standard error adjustment factors being the same, the adjusted standard error is 3.0 percent.

The formula for finding the standard error of the difference between data for two distinct areas is the same as for (5) above:

$$(6) \quad \text{s.e.}_{A \& B} = \sqrt{\text{s.e.}_A^2 + \text{s.e.}_B^2}$$

$$\sqrt{2.3^2 + 3.0^2}$$

$$\sqrt{14.29} = 3.8 \text{ percent}$$

This means that the difference between the family poverty rates in the two census tracts has a 95-percent confidence interval of plus or minus 7.6 percent. It can range from -2.6 to + 12.6 percent, and that, of course, includes zero (that is, no difference). This means that random chance alone may have accounted for the observed difference. In other words, the census sample does not yield sufficient evidence to conclude that the poverty rates of the two tracts are different.

### How Can One Find Standard Errors for Averages and Correlations?

The methods above apply to sample estimates and percentages; they must be modified for dealing with medians and means. (A “median” is the middle number in a series from highest to lowest. A “mean” is the total amount divided by the number of items added.) One must also adjust the methods above for correlations. Appendix C of the 1990 CPH-3 and other series with sample data will show how to make the necessary modifications in the computations.

This section of the chapter has considered sampling errors. However, another kind of error affects both samples and the 100-percent count they are derived from. Called “nonsampling” error, it simply refers to any kind of error not caused by the “laws of probability” inherent in sampling.

### HOW “NONSAMPLING” ERRORS AFFECT THE DATA

Sampling causes some errors but not all. Even a census count may differ from what's called a “true value.” A true value refers to the actual number in the real world on Census Day—say, the true number of high school graduates in a particular census tract.

Human and mechanical errors will happen in a census of a quarter of a billion people. Some people may avoid being counted, despite the Census Bureau's many efforts to include them. Some people might misread questions, leave out answers, or put answers on the wrong line; and not all instances of such mistakes might be caught and

corrected through editing or following up with the people involved. Also, at every stage of census collection and processing, clerical and electronic errors can defy careful efforts at accuracy.

In fact, nonsampling error may be introduced during any of the various, complex operations used to collect and process census data.

So how does the Census Bureau deal with such varied sources of error? For details, refer to the 1990 census printed reports and technical documentation. Also, chapter 3 of this *Guide* describes some procedures designed to prevent or correct certain nonsampling errors. However, a general idea of the objective and methods of the agency in dealing with such errors is essential to the practical understanding of the statistics.

The objective of the census processing operation is to produce a set of data that describes the population as accurately as possible. To meet this objective, questionnaires were edited for consistency, completeness, and acceptability. (A questionnaire might have every question answered yet not be acceptable. For example, *write-in* entries such as “don’t know” and “NA”—for “not applicable”—were considered unacceptable.) Questionnaires were reviewed for omissions, certain specific inconsistencies, and population coverage. As a result of these operations, the staff followed up with telephone calls and personal visits to get the missing information and make corrections.

As part of a research project, discussed at the end of this chapter, the Census Bureau will judge the effectiveness of these procedures in controlling errors and publish its findings.

Evaluating the results of nonsampling errors is difficult. Their effects are by no means equally important. Some tend to “cancel each other out;” others do not.

“Nonsampling” errors may affect data two ways. They may come randomly. Errors (say, underestimates and overestimates) may tend to cancel one another out. If they are not random, they can cause “bias.” That happens when the same erroneous answers recur more often than others. Then the numbers tend to err in the same direction. It becomes a pattern that can distort both a 100-percent count and a sample. No simple formula or table can cope with bias. While random errors begin to vanish in large populations, bias can distort even national data. For example, researchers have found that many people report, on questionnaires, that their homes are newer than they really are. The result is that in some tables in 1980 census products the number of homes built before 1939 was underestimated for the whole country. In an effort to reduce the possibility of this particular bias, the Census Bureau has added “Don’t know” as an acceptable option in responding to question H 17, “About when was this building built?”

## WHEN ANSWERS ARE MISSING

In the processing operation, the Census Bureau established procedures aimed at producing accurate and complete statistics. Also during the data collection, in central

offices and in the field offices, the staff checked questionnaires for omissions and inconsistencies. They edited entries, using computers whenever practical. When necessary, they called or visited households.

## What Happens When One Answer Is Missing?

If followup efforts failed, computers replaced any missing or inconsistent data items for a person or housing unit. This procedure is called “allocation.” As in other censuses, the agency used data from persons or housing units with similar traits. Suppose a questionnaire left “marital status” blank for a 20-year-old son of the householder. The computer would fill in the same marital status as the last son processed in the same age group. Will the answer be right? For that person—maybe, maybe not. But for an area as a whole, research shows that discrepancies diminish when the technique is consistently applied. Given the careful controls, Census Bureau statisticians have found that such allocations improve the data.

How does it work? Take age data.

1. The computer stores the age for each person whenever reported. It classifies age by sex, relationship to householder, and marital status. It also notes certain other traits of that person and other members of the household.
2. When editing, the computer stores each age entry only until it processes the next one linked to the same characteristics. Then it replaces the stored entry with the new one.
3. When a questionnaire has no answer or an inconsistent answer on age, the computer refers to the last similar entry. It supplies the age of that person.

This process makes sure that any data allocated mirror the data actually reported for others living in the same areas. For an historical account of the procedural details, subject-by-subject, see the *1990 Census of Population and Housing History*, 1990 CPH-R-2, in preparation. Until it is published, readers may refer to a 1980 edition by the same title, series PHC80-R-2C.

## What Happens When No Questions Get Answers?

Editing includes another type of correction. This procedure, sometimes called “substitution,” supplies a full set of characteristics for a person or housing unit. Suppose a housing unit was occupied, but the questionnaire did not list the occupants or it supplied no information on them. Then, by means of an editing procedure, data from another occupied housing unit were assigned to the housing unit with no data. A similar procedure assigned housing data for vacant units.

## How Can One Find Which Data Were Replaced?

Tables show the extent and effect of replacements. They follow the data tables in the 1990 CP-1, 1990 CP-2, 1990 CH-1, and 1990 CH-2 reports. They also appear at the end of the record for each area on all summary tape files (STF's).

Allocations can bias data. The traits of those who answer may differ from those who don't. For instance, research shows that those who answer the income question usually have lower incomes than those who don't. Substituted data can affect complete counts because they replace the whole record for a person or housing unit.

Most tables show subject detail only for the Nation or State. The top of figure 6–9 illustrates that. The first column shows the data as they appear elsewhere. That means after the Census Bureau substituted and allocated data. The second column shows the effect of allocated data only. The third column shows data without "imputation." Imputing means substituting and allocating data. Tables give percentages for each item.

The bottom part of figure 6–9 also covers data allocated and substituted. It gives rates for each area. It does not show the subject detail found in the State table at the top. The table on the bottom includes metropolitan and urbanized areas as well as incorporated (and other) places of 1,000 persons or more. Printed allocation tables exclude small places, county subdivisions, census tracts, block numbering areas, block groups, and blocks. Summary tape files give equal detail for all areas.

The methods (for substituting and allocating data) discussed so far may be familiar to those who used the 1980 census data. For 1990, however, the Census Bureau has developed a new procedure with a new purpose.

## HOW A NEW PROCEDURE PROTECTS CONFIDENTIAL INFORMATION AND YIELDS MORE DATA

To maintain confidentiality required by law (in keeping with Title 13, United States Code), the Bureau of the Census applies a confidentiality edit to assure published data do not disclose information about specific individuals, households, and housing units. The result is that a small amount of uncertainty is introduced into some of the census characteristics to prevent identification of specific individuals, households, or housing units.

The edit is controlled so that the counts of total persons, totals by race and American Indian tribe, Hispanic origin, and age 18 years and over are *not affected* by the confidentiality edit and are published as collected. In addition, total counts for housing units by tenure are not affected by this edit.

For the 100-percent data, the confidentiality edit consists of selecting a sample of households and interchanging their data with data on other households that have certain identical characteristics but different geographic locations.

For sample data, the confidentiality edit consists of selecting a small number of sample households and erasing data for several items to avoid disclosing information about specific households or individuals. The Census Bureau then replaced these data with data for other households with some identical characteristics. As an extra protection for confidentiality in small areas, the Census Bureau uses a larger percentage of population in its samples.

The net result of this procedure is that the data user's ability to obtain census data, particularly for small areas and small groups within the population, has been significantly enhanced. Many statistics will come from the 1990 census that could not have been released in earlier years. Moreover, studies have demonstrated the high quality of the data.

## RESEARCH AND EVALUATION FOR CONTINUING IMPROVEMENT

The Census Bureau has initiated the Research, Evaluation, and Experimental (REX) Program to encompass all research and evaluation projects for the 1990 census. This program includes evaluations of the coverage of the census, the accuracy of its content, and analysis of the efficacy of the data collection and processing operations.

- The Content Studies examine the quality and accuracy of census data. For instance, one study measures variance in responses to census questions when the same questions are asked a second time.
- The Coverage Studies examine the census undercount. Included in these studies are Demographic Analysis (DA) research, Post-Enumeration Survey (PES) results, and Ethnographic Evaluations of Behavioral Causes of Undercount. In addition, the Coverage Improvement Techniques evaluations measure the improvement in the census and the cost effectiveness due to each census operation.
- The Collection and Processing Studies encompass results such as those from a survey evaluating outreach efforts for the 1990 census.

Readers interested in more information about the REX program and the studies resulting from it may contact the Research and Evaluation Branch, Decennial Management Division, Bureau of the Census, Washington, DC 20233-7100; 301-763-2372.

## SUMMARY

Getting the most out of census data depends on many things. It depends, for example, on selecting subjects, geographic areas, and data products appropriate for a specific project. It also depends on a practical understanding of statistical principles and procedures that could affect the data used. Such an understanding is the goal of this chapter. It offers the following guidelines:

Figure 6-9. Characteristics of Persons Before and After Allocation and Substitution: 1990

[1990 data. The 1990 report discussed the sample, symbols, and definitions. This report was for Oklahoma]

State	Persons			Percent distribution		
	After allocation and substitution	After allocation	Before allocation and substitution	After allocation and substitution	After allocation	Before allocation and substitution
<b>RACE</b>						
<b>All persons</b> .....	<b>3 145 585</b>	<b>3 128 431</b>	<b>3 083 901</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
White .....	2 583 512	2 569 903	2 534 744	82.1	82.1	82.2
Black .....	233 801	232 302	227 939	7.4	7.4	7.4
American Indian, Eskimo, or Aleut .....	252 420	250 763	247 596	8.0	8.0	8.0
Asian or Pacific Islander .....	33 563	33 404	32 670	1.1	1.1	1.1
Other race .....	42 289	42 059	40 952	1.3	1.3	1.3
<b>HISPANIC ORIGIN</b>						
<b>All persons</b> .....	<b>3 145 585</b>	<b>3 128 431</b>	<b>2 845 930</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Hispanic origin (of any race) .....	86 160	85 716	79 445	2.7	2.7	2.8
Mexican .....	63 226	62 895	59 104	73.4	73.4	74.4
Puerto Rican .....	4 693	4 676	4 351	5.4	5.5	5.5
Cuban .....	1 043	1 039	935	1.2	1.2	1.2
Other Hispanic .....	17 198	17 106	15 055	20.0	20.0	19.0
Not of Hispanic origin .....	3 059 425	3 042 715	2 766 485	97.3	97.3	97.2
<b>SEX</b>						
<b>All persons</b> .....	<b>3 145 585</b>	<b>3 128 431</b>	<b>3 094 256</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Male .....	1 530 819	1 522 422	1 507 152	48.7	48.7	48.7
Female .....	1 614 766	1 606 009	1 587 104	51.3	51.3	51.3
<b>AGE</b>						
<b>All persons</b> .....	<b>3 145 585</b>	<b>3 128 431</b>	<b>3 054 121</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Under 6 years .....	274 587	273 161	267 552	8.7	8.7	8.8
6 to 14 years .....	427 950	425 872	417 618	13.6	13.6	13.7
15 to 17 years .....	134 470	133 834	131 293	4.3	4.3	4.3
18 and 19 years .....	98 623	98 189	95 770	3.1	3.1	3.1
20 to 24 years .....				3.1	3.1	3.1
25 to 29 years .....				7.1	7.1	7.0

[1990 data]

State Urban and Rural and Size of Place Inside and Outside Metropolitan Area County Place and [In Selected States] County Subdivision [1,000 or More Persons]	All persons	Percent of—							
		Persons substi- tuted for noninter- view	Persons with one or more items al- located	Persons with allocated—				Persons in house- holds with rela- tionship allocated	Persons 15 years and over with mar- ital status allocated
				Race	Origin (of any race)	Sex	Age		
<b>The State</b> .....	<b>3 145 585</b>	<b>.5</b>	<b>14.4</b>	<b>1.4</b>	<b>9.0</b>	<b>1.1</b>	<b>2.4</b>	<b>2.1</b>	<b>1.7</b>
<b>URBAN AND RURAL AND SIZE OF PLACE</b>									
Urban .....	2 130 139	.5	14.5	1.4	9.3	1.0	2.3	2.1	1.8
Inside urbanized area .....	1 354 343	.5	14.0	1.4	8.6	1.0	2.4	2.2	1.9
Central place .....	951 056	.6	15.1	1.5	9.4	1.0	2.6	2.3	2.1
Urban fringe .....	393 287	.3	11.4	1.2	6.7	.8	2.2	1.8	1.4
Outside urbanized area .....	775 796	.4	15.5	1.4	10.5	1.1	2.1	1.8	1.6
Place of 10,000 or more .....	468 855	.3	15.6	1.4	10.7	1.1	2.1	1.8	1.7
Place of 2,500 to 9,999 .....	306 941	.5	15.2	1.3	10.1	1.1	2.2	1.9	1.4
Rural .....	1 015 446	.7	13.9	1.5	8.3	1.2	2.4	2.1	1.4
Place of 1,000 to 2,499 .....	146 931	.8	12.2	1.3	6.6	1.0	2.3	1.9	1.1
Place of less than 1,000 .....	128 356	.6	13.1	1.6	7.5	1.1	2.6	2.0	1.1
Other rural .....	740 159	.7	14.4	1.5	8.8	1.3	2.4	2.1	1.5
<b>INSIDE AND OUTSIDE METROPOLITAN AREA</b>									
Inside metropolitan area .....	1 869 842	.5	14.4	1.4	9.0	1.0	2.5	2.1	1.8
In central city .....	1 043 979	.6	15.0	1.5	9.5	1.0	2.5	2.3	2.1
Not in central city .....	825 863	.5	13.7	1.3	8.4	1.0	2.6	2.0	1.5
Outside metropolitan area .....	532 607	.3	12.9	1.2	7.9	.9	2.3	1.9	1.6
Inside urbanized area .....	394 894			1.2	6.6			1.8	1.4

1. Look for corrections. When questions are raised before a data product is issued, notes or corrections usually appear in the report or documentation. When questions are raised afterwards, notes come out separately. People who purchase technical documentation automatically receive notes free by mail. Others may request notes from Customer Services (Corrections), Bureau of the Census, Washington, DC 20233-8300.
2. Check definitions before using the data. Common words can have special meanings. Examples include “family,” “farm,” and “income.” Definitions will appear in the 1990 census Glossary (to be published), appendixes to technical documentation for data files, and most published reports.
3. Expect sample and 100-percent data to differ slightly. The technique, called “sample weighting,” for estimating data for the total population from the sample only approximates the actual counts.
4. Usually, if 100-percent data are available for an item, use them. However, if part of a ratio comes from a sample, so should the rest of it.
5. Use estimates, “sample data,” conservatively. Use tables on standard errors (along with tables that compensate for other problems) in the data files and reports or the formulas in this chapter. These tables

and formulas show how much confidence to put in an estimate—the “confidence interval.” One can be more confident that a number will be within a wide range rather than a narrow one. “Sampling variability” refers to that range. That variation comes from the chance one takes in using an estimate instead of a count. It might be trivial for large populations, crucial for small ones. **Use estimates cautiously if the number of responses is small.**

6. Be aware of errors in the 100-percent count. “Non-sampling” errors affect both the sample and the 100-percent counts from which they are chosen. Both are affected by inconsistent answers, undercount, and other problems in collecting and processing data. The Census Bureau is studying the effect of errors and will publish its findings.
7. Keep in mind the steps the Census Bureau takes to protect confidential information. For the 1990 census, the staff developed a new program called the confidentiality edit. Now people will have more data about small areas to use for planning and the like—with no risk that personal information might be disclosed.

With these considerations in mind, one can use the data wisely for many needs.

# CHAPTER 7.

## Further Assistance

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### INTRODUCTION

Where can users go for guidance about using census data? What services are offered? Who offers them? What publications are the best sources of additional information?

This chapter answers these questions. First, it briefly describes sources of assistance. Then, it provides a chart specifying services and the organizations that provide them. Finally, it cites reference guides and other publications that are important sources of additional information.

The services and other assistance discussed here generally apply to the Census Bureau's surveys, economic censuses, and other statistical activities, in addition to the 1990 census.

### PRINCIPAL SOURCES OF ASSISTANCE

#### Census Bureau

**Regional Offices**—The Census Bureau's 12 regional offices (listed in fig. 7-1) have information specialists to assist users in a variety of ways. They answer inquiries about Census Bureau programs and products, make presentations, assist people in getting the data they need, and conduct training courses and workshops for groups interested in the statistical programs of the Census Bureau. The regional offices also maintain libraries of Census Bureau publications that are available to users for reference.

**Washington, DC Headquarters**—The Data User Services Division prepares reference materials (such as guides, newsletters, and catalogs) and handles product inquiries. Through its Customer Services, it also sells computer tapes, CD-ROM's, and other machine-readable products; census maps; some publications; and microfiche. The division offers an electronic bulletin board (301-763-7554) that users may access to learn of the latest data product releases. The Data User Services Division also maintains an online system, called CENDATA™, that presents a wide variety of current economic and demographic data, including key excerpts of data from 1990 census products.

Two information service companies are offering CENDATA™ to their customers. For more information about CENDATA™ content and online services contact: CompuServe, 800-848-8199; or DIALOG Information Services, 800-334-2564. Or, for content information only: Data User Services Division, 301-763-2074

Other Census Bureau staff answer inquiries about their subject specialties (such as population, income, housing, retail trade, or agriculture) and prepare special tabulations from original census or survey records. A telephone contacts list, found in the appendix under "Census Bureau — Washington," gives the names and phone numbers of Census Bureau staff according to their areas of expertise.

In addition to the training offered by Census Bureau regional office staff, headquarters staff periodically conducts seminars and workshops in Washington, DC and other cities on various topics. They last from one-half day to 4 days, and there is a nominal fee. Current courses include:

- In the Eye of the TIGER
- 1990 Census Data for Small Computers
- Understanding Federal Statistics
- 1990 Census Public Use Microdata Samples

The Census Bureau also has a Census Education Project for elementary and secondary schools and colleges. The Census Bureau prepares such items as instructors' guides, application exercises, bibliographies, and visual aids.

For information about training, conferences, and classroom materials, contact the Training, Education, and Marketing Staff (TEAMS), Data User Services Division, Bureau of the Census, Washington, DC 20233-8300 (301-763-1510).

#### State Data Centers

All States, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands of the United States have established State Data Centers (SDC's)—including State-level organizations and their affiliates (a total of about 1,400 organizations). These centers have been set up through cooperative agreements between the Census Bureau and the States and other areas to improve access to and use of the Census Bureau and related statistical resources.

SDC's provide users with consultation services, tape processing services, training courses, and in some cases, analytical support for planning, research, and decision making. Generally, these services are provided at cost.

Figure 7-1. **Census Bureau Regional Offices—Information Services**

<p><b>Atlanta, GA</b>                  101 Marietta Street, N.W.                  30303-2700                  Telephone: 404-730-3833</p> <p><b>Boston, MA</b>                  Boston Federal Office Bldg., Rm. 553                  10 Causeway Street                  02222-1084                  Telephone: 617-565-7078</p> <p><b>Charlotte, NC</b>                  222 South Church Street, Suite 505                  28202-3220                  Telephone: 704-344-6144</p> <p><b>Chicago, IL</b>                  175 West Jackson Blvd., Rm. 527                  60604-2689                  Telephone: 312-353-0980</p> <p><b>Dallas, TX</b>                  6303 Harry Hines Blvd., Rm. 210                  75235-5228                  Telephone: 214-767-7105</p> <p><b>Denver, CO</b>                  6900 W. Jefferson Avenue                  P.O. Box 272020                  80227-9020                  Telephone: 303-969-7750</p> <p><b>Detroit, MI</b>                  27300 West 11 Mile Road, Suite 200                  Southfield, MI 48034-2244                  Telephone: 313-354-4654</p> <p><b>Kansas City, KS</b>                  Gateway Tower II, Suite 600                  400 State Avenue                  66101-2410                  Telephone: 913-236-3711</p> <p><b>Los Angeles, CA</b>                  15350 Sherman Way, Suite 300                  Van Nuys, CA 91406-4224                  Telephone: 818-904-6339</p> <p><b>New York, NY</b>                  Jacob K. Javits Federal Bldg.                  26 Federal Plaza, Rm. 37-130                  10278-0044                  Telephone: 212-264-4730</p> <p><b>Philadelphia, PA</b>                  105 South 7th Street, 1st fl.                  19106-3395                  Telephone: 215-597-8313</p> <p><b>Seattle, WA</b>                  101 Stewart Street, Suite 500                  98101-1098                  Telephone: 206-728-5314</p>
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The statistics on hand at SDC organizations are for the State as a whole and local areas within the State; some holdings include data for other States as well.

SDC organizations are listed in the appendix under "Data Centers."

**Business/ Industry Data Centers**

A number of States also participate in the Census Bureau's Business/ Industry Data Center (BIDC) Program. Participants receive economic data and related assistance and training from the Census Bureau and other Federal agencies to further economic development in their States and to assist businesses and other users of economic data. (Participants are noted in the appendix in the "Data Centers" list.)

**Census Information Centers**

The Census Bureau also sponsors Census Information Centers, a program to give nonprofit organizations better access to census data with a focus on minority concerns. Participants receive relevant Census Bureau data and disseminate them to their member organizations and the public. The Census Bureau is conducting a pilot project with these groups:

Asian American Health Forum  
 San Francisco, CA (415-541-0866)

IndianNet Information Center  
 Washington, DC (202-338-8809)

National Council of La Raza  
 Washington, DC (202-289-1380)

National Urban League  
 Washington, DC (202-898-1604)

Southwest Voter Research Institute  
 San Antonio, TX (512-222-8014)

For more information about this program, contact the National Services Program at the Census Bureau (301-763-1384).

**National Clearinghouse for Census Data Services**

The National Clearinghouse for Census Data Services is a register of organizations that offer users special assistance in obtaining and using data and related products prepared by the Census Bureau. The organizations offer assistance ranging from informational services, such as seminars or workshops, to technical services, such as providing tape copies or advice about software for using TIGER extract files.

Clearinghouse organizations are not franchised, established, or supported by the Bureau. Each organization determines its own methods of operation, prices, and clientele eligible for services. The appendix lists these organizations.

Figure 7-2. **Guide to Census Data Services**

<b>Service</b>	<b>Where to find it<sup>1</sup></b>
Offering access to census reports and microfiche for reference .	Census Bureau regional offices (figure 7-1), State Data Center (SDC) organizations, Business/ Industry Data Center (BIDC) organizations, Department of Commerce offices, many libraries
Answering questions about which data are available and where to find them .....	Census Bureau regional offices and headquarters, SDC organizations, BIDC organizations, many libraries
Offering access for reference to printouts and reports generated from census summary tape files .....	SDC organizations, BIDC organizations, and some National Clearinghouse organizations
Analyzing data, preparing special studies, and producing tabulations generated from summary tape files and public-use micro-data files .....	SDC organizations, BIDC organizations, National Clearinghouse organizations
Selling census publications and printed maps .....	U.S. Government Printing Office (GPO) and its bookstores. (Publications out of stock at GPO are sometimes available from Customer Services at the Census Bureau.)
Selling data on computer tape, CD-ROM, microfiche, and other media .....	Customer Services, Census Bureau; State Data Center organizations; BIDC organizations; some National Clearinghouse organizations
Selling census maps (prepared on electrostatic plotters).....	Customer Services, Census Bureau
Selling online access to CENDATA™ .....	CompuServe and DIALOG, information service companies
Preparing customized data products from the Census Bureau nonpublic files.....	Census Bureau (see discussion in ch. 5)
Training (in workshops, seminars, etc.) concerning census data products and maps, and how to select and use data .....	Census Bureau regional offices and Training, Education, and Marketing Staff (TEAMS), Data User Services Division; State Data Center organizations; some National Clearinghouse organizations

<sup>1</sup>The appendix provides lists of several of the sources noted here. The service offered will vary greatly from one organization to another, as will charges (if any) for services.

**Other Sources of Assistance**

The U.S. Department of Commerce offices in major cities keep reference libraries that include Census Bureau publications. Many of the more than 1,400 Federal depository libraries and all Census depository libraries also have Census Bureau publications for reference. The appendix includes lists of the Commerce offices and depository libraries. Since holdings vary greatly, it is wise to call ahead and make sure needed materials are on hand.

Other government agencies, libraries, and private firms not connected with the Census Bureau sometimes have census reports for reference and offer other assistance. Also, many Federal agencies offer a variety of other statistics (see appendix).

**SERVICES TO USERS**

As suggested in the preceding sections, various organizations provide services of value to data users. These services and the organizations likely to offer them are summarized in figure 7-2. More information about any of the services discussed may be obtained from Census Bureau regional offices or from the Customer Services, Bureau of the Census, Washington, DC 20233-8300.

**OTHER CENSUS BUREAU DATA RESOURCES**

This section provides an overview of the statistical programs the Census Bureau is responsible for in addition to the census of population and housing.

Data users will find more information about them and descriptions of their data products in the annual *Census Catalog and Guide*. Special guides and brochures are also prepared for most of them. Contact the Census Bureau's Customer Services for more information.

## Demographic and Housing Programs

Three types of programs complement the 10-year census: surveys, estimates, and special censuses.

Much of the current population data from the Census Bureau is derived from the Current Population Survey (CPS). The monthly CPS is the most important survey vehicle for preparing intercensal estimates of the characteristics of the Nation's population. It is a sample survey of the civilian noninstitutional population of the United States and includes about 57,000 households.

The Census Bureau conducts the CPS under the sponsorship of the Bureau of Labor Statistics. Mainly designed to collect monthly information on unemployment and the labor force, the survey also covers a range of population characteristics such as marriage, household composition, migration, work history, and income.

The CPS updates census data and also touches on subjects not covered in the census. For instance, every 2 years, coinciding with National elections, the November CPS asks whether respondents have registered and voted. Although more current than the census, the survey is not large enough to permit the preparation of statistics for small geographic areas. Instead, the survey produces statistics for the Nation, census regions, some States, and the largest metropolitan areas.

In October 1983, the Census Bureau initiated the Survey of Income and Program Participation (SIPP). The SIPP is a nationwide survey designed to provide comprehensive longitudinal information on the economic situation of households and persons in the United States. This survey was the first to regularly collect information on cash and noncash income, eligibility and participation in various government transfer programs, labor force status, assets and liabilities, and many other topics to learn how changes in people's lives affect their economic well-being. The survey sample currently consists of about 20,000 households.

In addition to conducting current surveys, the Census Bureau helps prepare population estimates under the Federal-State Cooperative Program. For this program, the Census Bureau and State agencies jointly prepare annual county estimates for use in State and Federal planning and funding.

Using administrative and other records, the Census Bureau periodically produces population estimates for all of the country's general purpose governmental units.

It makes annual and monthly estimates of the population of the United States by age, race, and sex; annual estimates of States by age; and annual total population estimates for metropolitan areas (MA's). The Census Bureau also prepares a variety of population projections.

The American Housing Survey (AHS), previously called the Annual Housing Survey, provides current housing data. The survey, sponsored by the Department of Housing and Urban Development, updates housing information from the census and provides statistics on environmental conditions and on various housing quality indicators not covered in the census. For example, the AHS records whether a home has a leaky roof, holes in the walls, broken steps, or peeling paint. The AHS consists of two separate parts: a national sample of housing units surveyed every other year in odd-numbered years; and a sample from 44 MA's, 11 of which are surveyed each year over a 4-year period.

Upon request, the Census Bureau conducts special population censuses for counties, cities, villages, townships, and school districts needing up-to-date census figures. The requesting governments pay all associated expenses.

A special census can be conducted only with the authorization of the appropriate State or local government. For example, a countywide census must have the approval of the governing board of the county. A State or county can, however, contract to have a census taken for less than the entire jurisdiction.

For more information about special censuses, authorized local officials should write or call the Office of Special Censuses, ISPC, Bureau of the Census, Washington, DC 20233-3600, telephone 301-763-8321.

## Economic Censuses and Surveys

The economic censuses provide statistics about business establishments once every 5 years, covering years ending in "2" and "7." The 1987 Economic Censuses include the censuses of retail trade, wholesale trade, service industries, transportation, manufactures, mineral industries, and construction industries. Also included are related programs, such as statistics on minority- and women-owned businesses, enterprise statistics, and censuses of economic activity in Puerto Rico and some of the outlying areas under U.S. jurisdiction. Reports from the 1992 Economic Censuses (taken in 1993) will start appearing in late 1993.

Several key statistics are tabulated for all industries covered in the censuses. They include number of establishments, number of employees, payroll, and measure of output (sales or receipts, and value of shipments or of work done). Other items vary from sector to sector.

The Census Bureau also has programs that provide current statistics on such measures as total sales of particular kinds of businesses or production of particular products for the United States. These programs include monthly, quarterly, and annual surveys, the results of which appear in publication series such as *Current Business Reports* and *Current Industrial Reports*. The County Business Patterns program offers annual statistics based on data compiled primarily from administrative records, including those from Puerto Rico.

## Agriculture Census and Surveys

The agriculture census is conducted concurrently with the economic censuses. It is the only source of uniform agricultural data at the county level. It also covers Puerto Rico and outlying areas. It provides data on such subjects as the number and size of farms; land use and ownership; livestock, poultry, and crops; and value of products sold.

The Census Bureau conducted, for the United States only, the Farm and Ranch Irrigation Survey (1988), Census of Horticulture Specialties (1988), and Agricultural Economics and Land Ownership Survey (1988) in conjunction with the 1987 Census of Agriculture. Results appear in a variety of data products.

## Governments Census and Surveys

The census of governments, also for years ending in "2" and "7," covers all types of governments: Federal, State, county, municipal (place), township (county subdivision), school district, and special district. It provides data on such subjects as number of public employees, payrolls, revenue, and expenditures.

Annual and quarterly surveys cover the same principal subjects but generate data only for States and the largest local governments.

## Foreign Trade Statistics

Monthly U.S. merchandise trade data compiled by the Census Bureau summarize export and import transactions and are based on the official documents filed by shippers and receivers. These figures reflect the flow of merchandise but not intangibles like services and financial commitments. The trade figures trace commodity movements out of and into the U.S. Customs jurisdiction, which includes Puerto Rico and the Virgin Islands of the United States as well as the 50 States and the District of Columbia. Data are published separately on trade between the United States and Puerto Rico, the Virgin Islands of the United States, and other U.S. territories.

## Other Statistical Activities

The Census Bureau also offers international data. It maintains an international data base that is available to the public on computer tape and is used to produce the biennial *World Population Profile* report. It prepares studies dealing with the demographic and economic characteristics of other countries and world regions.

Statistical compendia are another important data product. These publications (sometimes also offered in machine-readable form) draw data from many sources and reorganize them for convenient use. The most widely used compendia are the annual *Statistical Abstract of the United States*, and the periodic *County and City Data Book* and the *State and Metropolitan Area Data Book*. They are described below.

## FOR MORE INFORMATION

The publications cited in the following sections are those most likely to be of interest to users of 1990 census data. The reports fall into three categories: 1990 census-related publications, 1980 census-related publications, and general reference publications. Entries include the symbols \* or + to indicate where they can be ordered:

\* Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, or its bookstores, listed in the appendix. (To charge to VISA, MasterCard, or GPO deposit account, call 202-783-3238.)

+ Customer Services, Bureau of the Census, Washington, DC 20233-8300. (301-763-4100)

Further information about any publication listed here may be obtained by contacting a Census Bureau regional office or Customer Services.

## Guidance for 1990 Census Users

The following publications are designed to furnish guidance, suggestions on using data, and other assistance to data users. They are either already available or are planned for publication during the next few years as 1990 census results become available. (Information on data report series and other data products is found in ch. 5.)

- *Census ABC's—Applications in Business and Community*. 1989. 16 pp. Free.+ This booklet is designed for people with little or no previous exposure to census data or statistics in general. It introduces readers to the 1990 census and offers numerous illustrations of practical applications of the data in situations likely to be encountered by small-business people and persons involved in community or neighborhood activities.
- *Census '90 Basics*. 1990. 20 pp. Free.+ This booklet highlights what information data users need to decide whether 1990 census data will be useful to them and, if so, which products to consider and how to obtain them. The booklet outlines census preparation and collection, subjects covered, geographic areas reported, data products, delivery media (including machine-readable), maps, reference publications, and sources of products and assistance.
- *1990 Census of Population and Housing Tabulation and Publication Program*. 1989. 51 pp. Free.+ This booklet gives complete descriptions of 1990 products, estimated publication dates, and a comparison of 1990 products with those of 1980.
- *1990 Census of Population, Alphabetical Index of Industries and Occupations*. Series 1990 CPH-R-3. 1992. \$19.\* GPO Stock No. 003-024-08080-0. It includes about 20,000 industry and over 29,000 occupation titles used in the population census, based on current U.S. standards for occupations.

- *1990 Census of Population, Classified Index of Industries and Occupations*. Series 1990 CPH-R-4. 1992. \$14.\* GPO Stock No. 003-024-08081-8. It presents, for each category in the industrial and occupational classification systems represented in the alphabetical index above, the individual titles that constitute the category.
  - *Counting for Representation: The Census and the Constitution*. 1987. 8 pp. Free.+ This brochure presents a discussion of apportionment and the Census Bureau's role in it. It was written to celebrate the Constitution Bicentennial (1987) and to anticipate the Census Bicentennial (1990). The message in the brochure is twofold: (1) apportionment is one of the Constitution's main ways to maintain balance and equity in government; and (2) being counted in the 1990 census is the way to make sure the Constitution continues to work in that respect. The history of apportionment and redistricting is traced, complete with figures and photos.
  - *Data Developments*. Issued irregularly. Free.+ These booklets describe data files released by the Census Bureau. They provide information on the file's subject matter, geographic coverage, reference materials, and how to order.
  - *Strength in Numbers: Your Guide to 1990 Census Redistricting*. Revised, 1991. 12 pp. Free.+ This booklet is a comprehensive guide to the redistricting data available from the Census Bureau to State officials and others interested in the redistricting process. It includes explanations of congressional reapportionment and Public Law 94-171, the 1975 statute requiring the Census Bureau to provide redistricting data to States. Most helpful is indepth coverage of maps and population tables used in redrawing legislative and voting district boundaries.
  - *TIGER: The Coast-to-Coast Digital Map Data Base*. 1990. 20 pp. Free.+ This booklet describes the structure and uses of the Topologically Integrated Geographic Encoding and Referencing (TIGER) System, an automated geographic data base. With TIGER extract files and suitable software, users can plot maps, display data from data files on maps, build geographic information systems, and accomplish other tasks.
  - *Maps and More: Your Guide to Census Bureau Geography*. 1992. 16 pp. Free.+ This booklet describes and illustrates 1990 census geographic entities, maps, and geographic files, and illustrates their use. Information on geographic entities and products related to other Census Bureau censuses and surveys also is included.
- Among the kinds of information to be found in these publications are descriptions of 1980 data products, definitions of population and housing concepts, and indexes to the tabulations. Some of the publications contain guidance for understanding the data products and examples of how to use the data that are also applicable to the 1990 census.
  - *Data Developments*. Issued irregularly. Free.+ This booklet series is described in the section above. See any recent edition of the *Census Catalog and Guide* for a listing of issues concerning 1980 census products.
  - *Guide to the 1980 Census Data on the Elderly*. 1987. 572 pp. Out of print.+ Available on microfiche or paperprints. This guide specifies where to look in the 1980 census data products for data on the older population. References cover all of the main sources of such data from the 1980 census. The data available provide social, economic, demographic, and housing characteristics of the elderly.
  - *Neighborhood Statistics From the 1980 Census*. 1984. 15 pp. Free from Data Access and Use Staff, Bureau of the Census, Washington, DC 20233-8300; 301-763-1584. This booklet is a brief illustrated guide to 1980 census data on neighborhoods. It describes statistics available from narrative profiles and tables. It features the uses of the data in social programs, ranging from education to housing and from daycare to aid to the elderly.
  - *Users' Guide (PHC80-R1)*. Part A. 1982. 127 pp. Out of print. Available on microfiche or paperprints.+
    - Supplement 1. 1982. 89 pp. \$6.+
    - Supplement 2. 1983. 148 pp. \$4.25.+
 This multivolume guide is a valuable reference source for the 1980 census.
    - Part A. Text is similar in organization and content to this 1990 census guide.
      - Supplement 1 includes Part B, Glossary; Updates (November 1982) to Part A; and Appendix A, "Sources of Assistance." Part B, Glossary, provides detailed definitions of population, housing, geographic, and technical terms associated with the census—especially important for people using 1980 data on tape or microfiche.
      - Supplement 2 consists of Part C, Index to Summary Tape Files 1 to 4. It is an index, subject by subject, to the hundreds of tables in the first four Summary Tape Files (STF's 1, 2, 3, and 4). It also furnishes table outlines for the STF's, showing exactly which categories are included and how they are presented.

## Publications on the 1980 Census

The following publications furnish information about the 1980 census that any user planning comparisons of 1980 and 1990 data will find valuable.

## 118 FURTHER ASSISTANCE

## Publications for General Reference

The following is a list of key reference publications for data users. These materials describe the products and services of the Census Bureau or, in the case of statistical compendia, furnish extensive data. They also direct data users to more detailed information about data developments and statistical reports.

- *Census and You*. Monthly. 8-16 pp. Annual subscription, \$18.\* (Sample copy free from Customer Services.+ ) This newsletter provides continuous reporting on plans for upcoming censuses, availability of statistical reports, workshops and conferences, user-oriented products and programs developed by the Census Bureau, applications of census data, new computer programs, data products from other Federal agencies, and more.
- *Census Catalog and Guide*. (Call Customer Services for information on the latest edition.) This annual, cumulative publication (editions normally appear in midsummer) describes all products (reports, maps, microfiche, computer tapes, diskettes, CD-ROM's, and online data) the Census Bureau issues, with ordering information and prices. An appendix lists State Data Centers and their local affiliates; other governmental, academic, and private organizations that can help data users; Federal and Census depository libraries; Census Bureau specialists by subject of expertise; and important statistical reports from other Federal agencies.
- *County and City Data Book*. (CCDB; a periodic Statistical Abstract supplement. Call Customer Services for information on the latest edition.) (Also available on microfiche, tape, diskette, and CD-ROM.+ ). The CCDB presents recent data on population, income, and employment; vital statistics; data on agriculture, business, and manufacturing; and other data from the Census Bureau, other Government agencies, and private sources. It provides statistics for every county and for every city with a population of 25,000 or more, as well as for metropolitan areas, States, regions, and divisions. It also provides a limited set of data for places with 2,500 or more. Special sections provide rankings for counties and cities, and population data for county seats.
- *Factfinder for the Nation*, series CFF. Issued irregularly. Individual brochures: multiple copies available for nominal prices, single copies free.+ Each brochure describes the range of Census Bureau materials available on a given subject and suggests some of their uses.
  1. Statistics on Race and Ethnicity. 1991. 4 pp.
  2. Availability of Census Records About Individuals. 1989. 4 pp.
  3. Agricultural Statistics. 1989. 4 pp.
  4. History and Organization. 1988. 12 pp.
  5. Reference Sources. 1991. 12 pp.
  6. Housing Statistics. 1991. 6 pp.
  7. Population Statistics. 1991. 6 pp.
  8. Census Geography—Concepts and Products. 1991. 8 pp.
  9. Construction Statistics. 1989. 4 pp.
  10. Retail Trade Statistics. 1989. 4 pp.
  11. Wholesale Trade Statistics. 1989. 4 pp.
  12. Statistics on Service Industries. 1989. 4 pp.
  13. Transportation Statistics. 1989. 4 pp.
  14. Foreign Trade Statistics. 1990. 4 pp.
  15. Statistics on Manufactures. 1990. 4 pp.
  16. Statistics on Mineral Industries. 1990. 4 pp.
  17. Statistics on Governments. 1990. 4 pp.
  18. Census Bureau Programs and Products. 1990. 16 pp.
  19. Enterprise Statistics. 1991. 4 pp.
  20. Energy and Conservation Statistics. 1991. 4 pp.
  21. International Programs. 1991. 4 pp.
  22. Data for Small Communities. 1991. 12 pp.
- *Monthly Product Announcement*. Monthly. 8-16 pp. Subscription, free.+ A listing of new products—publications, microfiche, maps, computer tapes, diskettes, and CD-ROM's—made available during the previous month. In addition to titles, entries include such information as GPO stock number or catalog numbers, Census Bureau series designations, and prices. Brief descriptions of some of the new products are also provided. Each Announcement includes order forms. For more frequent new product updates, access CENDATA™ or subscribe to the *Daily List* (\$300 per year; contact Customer Services).
- *State and Metropolitan Area Data Book*. (A periodic Statistical Abstract supplement. Call Customer Services for information on the latest edition.) The volume presents data for States and metropolitan areas (MA's) and the central cities and component counties of MA's. The data are drawn from the population and housing census, the economic censuses, Census Bureau surveys, and other governmental and private sources. Special sections provide rankings of States and MA's by various characteristics.
- *Statistical Abstract of the United States*: [year]. (Call Customer Services for information on the latest edition.) The volume provides a standard annual summary of statistics on the social, political, and economic characteristics of the United States. It also includes a guide to sources, listing over 1,000 publications; footnotes provide additional sources. Some tables are available on CENDATA™.

# APPENDIX

## Sources of Assistance

Many organizations throughout the Nation offer information and services to users of Census Bureau data. They often have at least some products from this *Guide* on hand for reference or purchase. Others offer statistical information from other sources, perhaps in addition to Census Bureau data.

To aid you in locating the information or services you need, the following pages provide lists (noted at right) of key sources of data and assistance. Additional information about most of the organizations listed is found in chapter 7.

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## GOVERNMENT PRINTING OFFICE BOOKSTORES

Atlanta, GA—Rm. 100, Federal Building, 275 Peachtree St., N.E., 30343. 404-331-6947

Birmingham, AL—O'Neill Building, 2021 3rd Avenue North, 35203. 205-731-1056

Boston, MA—Thomas P. O'Neill Federal Building, 10 Causeway Street, Room 179, 02222. 617-720-4180

Chicago, IL—Room 1365, Federal Building, 219 South Dearborn Street, 60604. 312-353-5133

Cleveland, OH—Room 1653, Federal Building, 1240 East 9th Street, 44199. 216-522-4922

Columbus, OH—Room 207, Federal Building, 200 North High Street, 43215. 614-469-6956

Dallas, TX—Room 1050, Federal Building, 1100 Commerce Street, 75242. 214-767-0076

Denver, CO—Room 117, Federal Building, 1961 Stout Street, 80294. 303-844-3964

Detroit, MI—Suite 160, Federal Building, 477 Michigan Avenue, 48226. 313-226-7816

Houston, TX—Texas Crude Building, Suite 120, 801 Travis Street, 77002. 713-228-1187

Jacksonville, FL—Room 158, Federal Building, 400 West Bay Street, 32202. 904-353-0569

Kansas City, MO—120 Bannister Mall, 5600 East Bannister Road, 64137. 816-765-2256

Los Angeles, CA—ARCO Plaza, C-Level, 505 South Flower Street, 90071. 213-239-9844

Milwaukee, WI—Room 190, Federal Building, 517 E. Wisconsin Avenue, 53202. 414-297-1304

New York, NY—Room 110, Federal Building, 26 Federal Plaza, 10278. 212-264-3825

Philadelphia, PA—Robert Morris Building, 100 North 17th Street, 19103. 215-597-0677

Pittsburgh, PA—Room 118, Federal Building, 1000 Liberty Avenue, 15222. 412-644-2721

Portland, OR—1305 S.W. First Avenue, 97201. 503-221-6217

Pueblo, CO—World Savings Building, 720 North Main Street, 81003. 719-544-3142

San Francisco, CA—Room 1023, Federal Building, 450 Golden Gate Avenue, 94102. 415-252-5334

Seattle, WA—Room 194, Federal Building, 915 Second Avenue, 98174. 206-553-4271

Washington, DC and vicinity—Government Printing Office, 710 North Capitol Street, N.W., 20401. 202-512-0132

Washington, DC—Farragut West, 1510 H Street, N.W., 20005. 202-653-5075

Government Printing Office, Warehouse Sales Outlet, 8660 Cherry Lane, Laurel, MD 20707. 301-953-7974

## CENSUS BUREAU—REGIONAL INFORMATION SERVICES

Atlanta, GA—101 Marietta St., N.W., 30303-2700. 404-730-3833

Boston, MA—Room 553, Boston Federal Office Building, 10 Causeway Street, 02222-1084. 617-565-7078

Charlotte, NC—Suite 505, 222 S. Church Street, 28202-3220. 704-344-6144

Chicago, IL—Room 527, 175 W. Jackson Boulevard, 60604-2689. 312-353-0980

Dallas, TX—Room 210, 6303 Harry Hines Blvd., 75235-5228. 214-767-7105

Denver, CO—6900 West Jefferson Avenue, Lakewood, 80235-2307. 303-969-7750

Detroit, MI—27300 West 11 Mile Road, Suite 200, Southfield, 48034-2244. 313-354-4654

Kansas City, KS—One Gateway Center, Fifth Floor, Fourth and State Streets, 66101-2419. 913-236-3711

Los Angeles, CA—Suite 300, 15350 Sherman Way, Van Nuys, 91406-4224. 818-904-6339

New York, NY—Room 37-130, Jacob K. Javits Federal Building, 26 Federal Plaza, Room 37-130, 10278-0044. 212-264-4730

Philadelphia, PA—First Floor, 105 South 7th Street, 19106-3395. 215-597-8313

Seattle, WA—101 Stewart St., Suite 500, 98101-1098. 206-728-5314

## CENSUS BUREAU—WASHINGTON

Note—Unless otherwise indicated, all telephone numbers listed below are in area code 301. The mailing address is as follows:

Name  
Title, or the acronym or abbreviation in parentheses following the name in the listings below.  
Bureau of the Census  
Washington, DC 20233

## EXECUTIVE STAFF

Director, Dr. Barbara Everitt Bryant, 763-5190

Deputy Director, C. Louis Kincannon, 763-5192

Associate Director for Decennial Census, Charles D. Jones, 763-5180

Associate Director for Demographic Programs, William P. Butz, 763-5167

Associate Director for Economic Programs, Charles A. Waite, 763-5274

Associate Director for Field Operations, Bryant Benton, 763-7247

Associate Director for Management Services, Bryant O. Benton (Acting), 763-7980

Associate Director for Statistical Design, Methodology, and Standards, Robert D. Tortora, 763-2562

Assistant Director for Administration, Clifford J. Parker, 763-2350

Assistant Director for Automated Data Processing, Arnold A. Jackson, 763-2360

Assistant Director for Communications, John J. Connolly, 763-4055

Assistant Director for Decennial Census, Peter A. Bounpane, 763-5613

Assistant Director for Economic and Agriculture Censuses, Roger H. Bugenhagen, 763-2076

## FREQUENTLY CALLED NUMBERS

Census Customer Services, 763-4100 (Fax: 763-4794)

Census Job Information (Recording), 763-6064

Census Personnel Locator, 763-7662

Congressional Affairs, 763-2446

Population Information, 763-5002/5020 (TTY)

Public Information Office, 763-4040

## KEY USER CONTACTS

Age Search (Access to Personal Census Records)—Staff (DUSD), 763-7936

Bulletin Board—Nancy Smith (DUSD), 763-1580

Business/ Industry Data Centers—John Rowe (DUSD), 763-1580

Census Catalog—John McCall (DUSD), 763-1584

CD-ROM—Staff (DUSD), 763-4677

CENDATA—Staff (DUSD), 763-2074

*Census and You* (Monthly Newsletter)—Jackson Morton/Neil Tillman (DUSD), 763-1584

Census History—Frederick Bohme (DUSD), 763-7936

Census Information Centers—Larry Carbaugh (DUSD), 763-1384

Clearinghouse for Census Data Services—Staff (DUSD), 763-1580

Confidentiality and Privacy Issues—Jerry Gates (PPDO), 763-5063

County and City, State and Metropolitan Area Data Books—Wanda Cevis (DUSD), 763-1034

Customer Services—Staff (DUSD), 763-4100

Education and Curriculum Support Projects—Staff (DUSD), 763-1510

Exhibits, Conventions—Joanne Dickinson (DUSD), 763-2370

Guides—Gary Young (DUSD), 763-1584

Historical Statistics—Staff (DUSD), 763-7936

International Visitors Program—Nina Pane Pinto/ Gene Vandrovec (ISPC), 763-2839

Legislation—Valerie Gregg/ Velma Lacy (PPDO), 763-7787/4001

Library—Staff (DUSD), 763-5042

*Monthly Product Announcement*—Mary Kilbride (DUSD), 763-1584  
 Ordering Information (Computer Software/ Tapes, Microfiche, Publications, etc.)—Customer Services (DUSD), 763-4100  
 Public-Use Microdata Samples—Carmen Campbell (DUSD), 763-2005  
 State Data Center Program—Sam Johnson (DUSD), 763-1580  
*Statistical Abstract*—Glenn King (DUSD), 763-5299  
*Statistical Briefs*—Robert Bernstein (DUSD), 763-1584  
 Training Courses—Staff (DUSD), 763-1510  
 Year 2000 Research and Development—Staff (2KS), 763-4271

## DEMOGRAPHIC PROGRAMS

### Decennial Census:

Content (General)—Al Paez (DPLD), 763-4251  
 Content and Tabulations (Program Design)—Patricia Berman (DPLD), 763-7094  
 Count Complaints 1990 Census—Ed Kobilarcik (DPLD), 763-4894  
 Counts for Current Boundaries—Joel Miller (GEO), 763-5720  
 Count Information, Decennial Census—Staff (POP), 763-5002/ 5020  
 Demographic Analysis—Gregg Robinson (POP), 763-5590  
 Litigation—Valerie Gregg (PPDO), 763-7787  
 Post-Enumeration Surveys—Howard Hogan (STSD), 763-1794  
 Reapportionment/ Redistricting—Marshall Turner, (DUSD), 763-5820  
 Sampling Methods, Decennial Census—Henry Woltman (STSD), 763-5987  
 Special Tabulations of Housing Data—Bill Downs (HHES), 763-8553  
 Special Tabulations of Population Data—Rosemarie Cowan, (POP), 763-7947  
 Tabulations and Publications (General)—Cheryl Landman/ Gloria Porter (DPLD), 763-3938/ 4908  
 User-Defined Areas Program (Neighborhood Statistics)—Adrienne Quasney (DPLD), 763-4282

### Housing and Income:

American Housing Survey—Edward Montfort (HHES), 763-8551  
 Components of Inventory Change Survey—Jane Maynard (HHES), 763-8551  
 Income Statistics—Staff (HHES), 763-8576  
 Information, Decennial Census—Bill Downs (HHES), 763-8553  
 Market Absorption/ Residential Finance—Anne Smoler/ Peter Fronczek (HHES), 763-8552  
 New York City Housing and Vacancy Survey—Margaret Harper (HHES), 763-8171  
 Vacancy Data—Paul P. Harple, Jr. (HHES), 763-8551

### International Statistics:

Africa, Asia, Latin America, North America, and Oceania—Frank Hobbs (CIR), 763-4221  
 China, People's Republic—Judith Banister (CIR), 763-4012  
 Europe—Godfrey Baldwin (CIR), 763-4022  
 Health—Peter Way (CIR), 763-4086  
 International Data Base—Peter Johnson (CIR), 763-4811  
 Soviet Union—Marc Rubin (CIR), 763-4022  
 Women in Development—Ellen Jamison (CIR), 763-4086

### Population:

Age and Sex (States, Counties)—Staff (POP), 763-5072  
 Age and Sex (U.S.)—Staff (POP), 763-7950  
 Aging Population—Arnold Goldstein (POP), 763-7883  
 Apportionment—Robert Speaker (POP), 763-7962  
 Child Care—Martin O'Connell/ Amara Bachu (POP), 763-5303/ 4547  
 Citizenship—Staff (POP), 763-7955  
 Commuting: Means of Transportation; Place of Work—Phil Salopek/ Celia Boertlein (POP), 763-3850  
 Consumer Expenditure Survey—Gail Hoff (DSD), 763-2063  
 Crime—Larry McGinn (DSD), 763-1735  
 Current Population Survey—Ronald Tucker (DSD), 763-2773  
 Disability—Jack McNeil (HHES), 763-8300  
 Education—Staff (POP), 763-1154  
 Employment, Unemployment—Thomas Palumbo/ Selwyn Jones (HHES), 763-8574  
 Estimates—Staff (POP), 763-7722  
 Families—Staff (POP), 763-7987  
 Farm Population (See Agriculture for other topics)—Don Dahmann (POP), 763-5158  
 Fertility/ Births—Martin O'Connell/ Amara Bachu (POP), 763-5303/ 4547  
 Foreign Born—Staff (POP), 763-7955  
 Group Quarters Population—Denise Smith (POP), 763-7883  
 Health Surveys—Robert Mangold (DSD), 763-5508  
 Hispanic and Other Ethnic Population Statistics—Staff (POP), 763-7955  
 Homeless Population—Cynthia Taeuber (POP), 763-7883  
 Household Estimates for States and Counties—Staff (POP), 763-5221  
 Household Wealth—Staff (HHES), 763-8578  
 Households and Families—Steve Rawlings (POP), 763-7987  
 Immigration (Legal/ Undocumented), Emigration—Karen Woodrow (POP), 763-5590  
 Journey to Work—Phil Salopek/ Gloria Swieczkowski (POP), 763-3850  
 Language—Staff (POP), 763-1154  
 Longitudinal Surveys—Ronald Dopkowski (DSD), 763-2767  
 Marital Status; Living Arrangements—Arlene Saluter (POP), 763-7987

Metropolitan Areas (MA's)—Richard Forstall (POP), 763-5158  
 Migration—Diana DeAre (POP), 763-3850  
 National Estimates and Projections—Staff (POP), 763-7950  
 Occupation and Industry Statistics—Staff (HHES), 763-8574  
 Outlying Areas—Michael Levin (POP), 763-5134  
 Place of Birth—Kristin Hansen (POP), 763-3850  
 Population Information—Staff (POP), 763-5002/ 5020 (TTY)  
 Poverty Statistics—Staff (HHES), 763-8578  
 Prisoner Surveys—Larry McGinn (DSD), 763-1735  
 Race Statistics—Staff (POP), 763-2607/ 7572  
 Sampling Methods—Preston J. Waite (SMD), 763-2672  
 School District Data—Jane Ingold (POP), 763-5476  
 Special Population Censuses—Ronald Dopkowski (DSD), 763-2767  
 Special Surveys—Ronald Dopkowski (DSD), 763-2767  
 State Projections—Staff (POP), 763-1902  
 State and Outlying Areas Estimates—Staff (POP), 763-5072  
 Survey of Income and Program Participation (SIPP)  
 SIPP: General Information—Staff (DSD), 763-2764  
 SIPP: Statistical Methods—Raj Singh (SMD), 763-7944  
 SIPP: Products—Carmen Campbell (DUSD), 763-2005  
 Travel Surveys—John Cannon (DSD), 763-5468  
 Veterans Status—Thomas Palumbo/ Selwyn Jones (HHES), 763-8574  
 Voting and Registration—Jerry Jennings (POP), 763-5080  
 Women—Denise Smith (POP), 763-7883

## ECONOMIC PROGRAMS

### Agriculture:

Crop Statistics—Donald Jahnke (AGR), 763-8567  
 Data Requirements and Outreach—Douglas Miller (AGR), 763-8561  
 Farm Economics—James Liefer (AGR), 763-8514  
 General Information—Tom Manning (AGR), 1-800-523-3215  
 Irrigation and Horticulture Statistics and Special Surveys—John Blackledge (AGR), 763-8560  
 Livestock Statistics—Linda Hutton (AGR), 763-8569  
 Puerto Rico, Virgin Islands, Guam, Northern Marianas—Kent Hoover (AGR), 763-8564

### Business Statistics:

Characteristics of Business Owners—Margaret Allen (ESD), 763-5517

**Foreign Trade:**

Trade Data Services—Haydn Mearkle (FTD), 763-5140/ 7754  
 Shippers' Declaration—Hal Blyweiss (FTD), 763-5310

**Retail Trade:**

Advance Monthly Sales, Annual Sales, Monthly Inventories—Ronald Pienckyoski (BUS), 763-5294  
 Census—Ann Russell (BUS), 763-7038  
 Monthly Retail Trade Report—Irving True (BUS), 763-7128

**Service Industries:**

Census—Jack Moody (BUS), 763-7039  
 Current Selected Services Reports—Thomas Zabelsky (BUS), 763-5528  
 Finance, Insurance, and Real Estate (Census)—Sidney Marcus (BUS), 763-1386  
 Utilities, Communication, and Transportation Census—Dennis Shoemaker (BUS), 763-2662

**Wholesale Trade:**

Census—John Trimble (BUS), 763-5281  
 Current Sales and Inventories—Dale Gordon (BUS), 763-3916

**Construction Statistics:**

Building Permits (C40 Series)—Linda Hoyle (CSD), 763-7244  
 Census—Bill Visnansky (CSD), 763-7546  
 New Residential Construction:  
 Characteristics, Price Index, Sales (C25 Series)—Steve Berman (CSD), 763-7842  
 Housing Starts (C20 Series)/ Completions (C22 Series)—David Fondelier (CSD), 763-5731  
 New Construction in Selected MSA's (C21 Series)—Dale Jacobson (CSD), 763-7842  
 Survey of Residential Improvements and Repairs (C50 Series)—George Roff (CSD), 763-5705  
 Value of New Construction Put in Place (C30 Series)—Allan Meyer (CSD), 763-5717

**Governments:**

Criminal Justice Statistics—Staff (GOVS), 763-7789  
 Employment—Staff (GOVS), 763-5086  
 Federal Expenditure Data—Staff (GOVS), 763-5276  
 Finance—Henry Wulf (GOVS), 763-7664  
 Governmental Organization—Staff (GOVS), 763-7789  
 Operations Support and Analysis—William Fanning (GOVS), 763-4403  
 Survey Operations—Genevieve Speight (GOVS), 763-7783  
 Taxation—Gerard Keffer (GOVS), 763-5356

**Manufacturing:**

Concentration, Exports from Manufacturing Establishments, and Production Index—Bruce Goldhirsch (IND), 763-1503  
 Durables (Census/ Annual Survey)—Kenneth Hansen (IND), 763-7304  
 Durables (Current Industrial Reports)—Ken McBeth/ Milbren Thomas (IND), 763-2518  
 Fuels/ Electric Energy Consumed—John McNamee (IND), 763-5938  
 Industries—John P. Govoni (IND), 763-7666  
 Monthly Shipments, Inventories, Orders—Kathy Menth (Acting) (IND), 763-2502  
 Nondurables (Census/ Annual Survey)—Michael Zampogna (IND), 763-2510  
 Nondurables (Current Industrial Reports)—Thomas Flood (IND), 763-5911  
 Research and Development, Capacity, Pollution Abatement—Elinor Champion (IND), 763-5616

**Special Topics:**

County Business Patterns—Zigmund Decker (ESD), 763-5430  
 Economic Census Products—Paul Zeisset (ECS), 763-1792  
 Employment/ Unemployment Statistics—Gordon Lester/ Thomas Palumbo (HHES), 763-8574  
 Enterprise Statistics—John Dodds (ESD), 763-1758  
 Geographic Areas of the Economic Censuses—Staff (GEO), 763-4667  
 Industry and Commodity Classification—Alvin Venning (ESD), 763-1935  
 Investment in Plant and Equipment—John Gates (IND), 763-5596  
 Mineral Industries—John McNamee (IND), 763-5938  
 Minority- and Women-Owned Businesses—Margret Allen (ESD), 763-5517  
 Quarterly Financial Report—Paul Zarrett (ESD), 763-2718  
 Accounting and Related Issues—Ronald Lee (ESD), 763-4270  
 Classification—Frank Hartman (ESD), 763-4274

**Puerto Rico, Virgin Islands, Guam:**

Censuses of Agriculture, Construction, Manufactures, Retail Trade, Services, and Wholesale Trade—Odell Larson/ Kent Hoover (AGR), 763-8226/ 8564

**Transportation:**

Truck Inventory and Use —William Bostic (BUS), 763-2735

**GEOGRAPHIC CONCEPTS AND PRODUCTS**

Area Measurement—Don Hirschfeld (GEO), 763-5720  
 Boundaries of Legal Areas:  
 Annexations, Boundary Changes—Nancy Goodman (GEO), 763-3827

State Boundary Certification—Louise Stewart (GEO), 763-3827  
 Census Geographic Concepts—Staff (GEO), 763-5720  
 Census Tracts:  
 Address Allocations—Ernie Swapshur (GEO), 763-5720  
 Boundaries, Codes, Delineation—Cathy Miller (GEO), 763-3827  
 Centers of Population—Don Hirschfeld (GEO), 763-5720  
 Congressional Districts:  
 Address Allocations—Ernie Swapshur (GEO), 763-5692  
 Boundaries, Component Areas—Robert Hamill (GEO), 763-572  
 Maps:  
 1980 Census Map Orders—Ann Devore (DPD), 812-288-3192  
 1990 Census Maps—Staff (DUSD), 763-4100  
 Cartographic Operations—Staff (GEO), 763-3973  
 Computer Mapping—Fred Broome (GEO), 763-3973  
 Metropolitan Areas (MSA's, PMSA's, and CMSA's)—James Fitzsimmons (POP), 763-5158  
 Outlying Areas—Lourdes Flaim (DPLD), 763-2903  
 Statistical Areas—Staff (GEO), 763-3827  
 TIGER System:  
 Applications—Larry Carbaugh (DUSD), 763-1384  
 Future Plans—Staff (GEO), 763-4664  
 Products—Staff (DUSD), 763-4100  
 Urban/ Rural Residence—Robert Speaker (POP), 763-7962  
 Voting Districts—Cathy McCully (GEO), 763-3827  
 ZIP Codes:  
 Demographic Data—Staff (DUSD), 763-4100  
 Economic Data—Anne Russell (BUS), 763-7038  
 Geographic Relationships—Rose Quarato (GEO), 763-4667

**STATISTICAL STANDARDS AND METHODOLOGY**

Statistical Research for Demographic Programs—Lawrence Ernst (SRD), 763-7880  
 Statistical Research for Economic Programs—Nash J. Monsour (SRD), 763-5702

**DEPARTMENT OF COMMERCE ITA OFFICES**

**ALABAMA**, Birmingham—Room 302, Berry Building, 2015 2nd Avenue North, 35205. 205-731-1331  
**ALASKA**, Anchorage—Suite 319, World Trade Center Alaska, 4201 Tudor Center Drive, 99508. 907-271-6237

**ARIZONA**, Phoenix—Room 3412, Federal Building, 230 North First Avenue, 85025. 602-379-3285.

**ARKANSAS**, Little Rock—Suite 811, US Able Corporate Center, 320 West Capitol Avenue, 72201. 501-324-5794

**CALIFORNIA**, Los Angeles—Room 9200, 11000 Wilshire Boulevard, 90024. 310-575-7105

Santa Ana—Suite 1, 116-A West 4th Street, 92701. 714-836-2461

San Diego—Suite 230, 6363 Greenwich Drive, 92122. 619-557-5395

San Francisco—14th Floor, 250 Montgomery Street, 94104. 415-705-2310

**COLORADO**, Denver—Suite 680, 1625 Broadway, 80202. 303-844-3246

**CONNECTICUT**, Hartford—Room 610-B, Federal Building, 450 Main Street, 06103. 203-240-3530

**FLORIDA**, Miami—Suite 224, Federal Building, 512 S.W. First Avenue, 33130. 305-536-5268

Clearwater—128 North Osceola Avenue, 34615. 813-461-0011

Orlando—C/O Central Florida University, College of Business Administration, Room 346, CEBA II, 32816. 407-648-6235

Tallahassee—Room 366-G Collins Building, 107 West Gaines Street, 32399-2000. 904-488-6469

**GEORGIA**, Atlanta—Plaza Square North, Suite 405, 4360 Chamblee Dunwoody Road, 30341. 404-445-7860

Savannah—Room A-107, 120 Barnard Street, 31401. 912-652-4204

**HAWAII**, Honolulu—P.O. Box 50026, 300 Ala Moana Boulevard, 96850. 808-541-1782

**IDAHO**, Boise—2nd Floor Joe R. Williams Building, 700 West State Street, 83720. 208-334-9254

**ILLINOIS**, Chicago—Room 1406, 55 East Monroe Street, 60603. 312-353-4450  
Wheaton—Illinois Institute of Technology, 201 East Loop Road, 60187. 312-353-4332

Rockford—P.O. Box 1747, 515 North Court Street, 61110-0247. 815-987-4347

**INDIANA**, Indianapolis—Suite 520, One North Capitol, 46204. 317-226-6214

**IOWA**, Des Moines—Room 817, Federal Building, 210 Walnut Street, 50309. 515-284-4222

**KANSAS**, Wichita—Kansas City, Missouri District Office, 151 N. Volusia, 67214-4695. 316-269-6160

**KENTUCKY**, Louisville—Room 636-B, Gene Snyder Courthouse and Customhouse Building, 601 West Broadway, 40202. 502-582-5066

**LOUISIANA**, New Orleans—432 World Trade Center, No. 2 Canal Street, 70130. 504-589-6546

**MAINE**, Augusta—Boston District Office, 77 Sewall Street, 04330. 207-622-8249

**MARYLAND**, Baltimore—413 U.S. Customhouse, 40 South Gay Street, 21202. 410-962-3560  
Gaithersburg—C/O National Institute of Standards and Technology, Building 411, 20899. 301-975-3904

**MASSACHUSETTS**, Boston—Suite 307, World Trade Center, Commonwealth Pier Area, 02210. 617-565-8563

**MICHIGAN**, Detroit—1140 McNamara Building, 477 Michigan Avenue, 48226. 313-226-3650

Grand Rapids—300 Monroe N.W. 49503. 616-456-2411

**MINNESOTA**, Minneapolis—108 Federal Building, 110 South Fourth Street, 55401. 612-348-1638

**MISSISSIPPI**, Jackson—201 West Capital Street, Suite 310, 39213. 601-965-4388

**MISSOURI**, St. Louis—Suite 610, 7911 Forsyth Boulevard, 63105. 314-425-3302  
Kansas City—Room 635, 601 East 12th Street, 64106. 816-426-3141

**NEBRASKA**, Omaha—11133 O Street, 68137. 402-221-3664

**NEVADA**, Reno—1755 East Plumb Lane, No. 152, 89502. 702-784-5203

**NEW HAMPSHIRE**, Concord—Boston District Office, State of New Hampshire, Department of Resources and Economic Development, 172 Pembroke Road, 03302-0856. 603-271-2591

**NEW JERSEY**, Trenton—Suite 100, 3131 Princeton Pike Building, No. 6, 08648. 609-989-2100

**NEW MEXICO**, Albuquerque—Room 320, 625 Silver S.W., 87102. 505-766-2070

**NEW YORK**, Buffalo—1312 Federal Building, 111 West Huron Street, 14202. 716-846-4191

Rochester—Suite 220, 111 East Avenue, 14604. 716-263-6480

New York—Room 3718, 26 Federal Plaza, 10278. 212-264-0634

**NORTH CAROLINA**, Greensboro—Suite 400, 400 West Market Street, 27401. 919-333-5345

**OHIO**, Cincinnati—9504 Federal Building, 550 Main Street, 45202. 513-684-2944  
Cleveland—Room 600, 668 Euclid Avenue, 44114. 216-522-4750

**OKLAHOMA**, Oklahoma City—6601 Broadway Extension, 73116. 405-231-5302  
Tulsa—440 South Houston Street, 74127. 918-581-7650

**OREGON**, Portland—Suite 242, One World Trade Center, 121 S.W. Salmon, 97204. 503-326-3001

**PENNSYLVANIA**, Philadelphia—Suite 202, 475 Allendale Road, King of Prussia, 19406. 717-386-3580

Pittsburgh—2002 Federal Building, 1000 Liberty Avenue, 15222. 412-644-2850

**PUERTO RICO**, San Juan (Hato Rey)—Room G-55, Federal Building, Chardon Avenue, 00918. 809-766-5555

**RHODE ISLAND**, Providence—Boston District Office, 7 Jackson Walkway, 02903. 401-528-5104

**SOUTH CAROLINA**, Columbia—Suite 172, Strom Thurmond Federal Building, 1835 Assembly Street, 29201. 803-765-5345

Charleston—Room 128, J. C. Long Building, 9 Liberty Street, 29424. 803-727-4361

**TENNESSEE**, Knoxville—301 East Church Avenue 37915. 615-549-9268

Memphis—Suite 200, The Falls Building, 22 North Front Street, 38103. 901-544-4137

Nashville—Suite 114, Parkway Towers, 404 James Robertson Parkway, 37219-1505. 615-736-5161

**TEXAS**, Dallas—World Trade Center, P.O. Box 58130, 2050 North Stemmons Freeway, S. 170, 75242-0787. 214-767-0542

Austin—Suite 1200, 816 Congress Avenue, P.O. Box 12728, 78711. 512-482-5939

Houston—Room 2625 Federal Courthouse Building, 515 Rusk Street, 77002. 713-229-2578

**UTAH**, Salt Lake City—Suite 105, 324 South State Street, 84111. 801-524-5116

**VIRGINIA**, Richmond—8010 Federal Building, 400 North 8th Street, 23240. 804-771-2246

**WASHINGTON**, Seattle—Suite 290, 3131 Elliott Avenue, 98121. 206-553-5615

**WEST VIRGINIA**, Charleston—Suite 807, 405 Capitol Street, 25301. 304-347-5123

**WISCONSIN**, Milwaukee—Room 596, 517 East Wisconsin Avenue, 53202. 414-297-3473

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## DATA CENTERS

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This section lists organizations associated with two Census Bureau-sponsored programs: the State Data Center Program and the Business/ Industry Data Center Program. The State Data Centers (SDC's) receive Census Bureau data products for their States and make the data and related services available to users. The Business/ Industry Data Centers (BIDC's) also receive data products and complement

the work of the SDC's. They focus especially on economic data and assistance to businesses and economic development agencies in their State. See chapter 7 for additional information about the SDC and BDC Programs.

All States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam have SDC programs. Many have also established BDC programs. The programs have designated lead agencies, coordinating agencies, and affiliates. In the following joint listing, BDC participants are identified by "(BDC)" at the end of an entry. Organizations that are both SDC and BDC participants are noted similarly: "(SDC/ BDC)."

## ALABAMA

### Lead Agency

Annette Watters, Alabama State Data Center, Center for Business and Economic Research, University of Alabama, P.O. Box 870221, **Tuscaloosa**, 35487-0221. 205-348-2953

### Coordinating Agencies

Parker Collins, Office of State Planning, Department of Economic and Community Affairs. P.O. Box 250347, **Montgomery**, 36125-0347. 205-284-8630  
Hilda Dent, Alabama Public Library Service, 6030 Monticello Dr., **Montgomery**, 36130. 205-277-7330

### Affiliates

**Anniston**—East Alabama Regional Planning and Development Commission. 205-237-6741  
**Auburn**—Center for Governmental Services, Auburn University. 205-844-4781  
**Birmingham**—Birmingham Area Chamber of Commerce. 205-323-5461  
Birmingham Public Library. 205-226-3680  
Birmingham Regional Planning Commission. 205-251-8139  
Center for Urban Affairs, University of Alabama at Birmingham. 205-934-3500  
**Camden**—Alabama-Tombigee Regional Commission. 205-682-4234  
**Decatur**—North Central Alabama Regional Council of Governments. 205-355-4515  
**Dothan**—Houston-Love Memorial Library. 205-793-9767  
Southeast Regional Planning and Development Commission. 205-794-4093  
**Gadsden**—Gadsden Public Library. 205-549-4699  
**Huntsville**—Huntsville Public Library. 205-532-5975  
Top of Alabama Regional Council of Governments. 205-533-3330  
**Jacksonville**—Center for Economic Development and Business Research, Jacksonville State University. 205-782-5324  
**Livingston**—Livingston University. 205-652-9661

**Mobile**—Mobile Public Library. 205-434-7078  
South Alabama Regional Planning Commission. 205-433-6541  
University of South Alabama Library. 205-460-7024  
**Montgomery**—Central Alabama Planning and Development Commission. 205-262-4300  
South Central Alabama Development Commission. 205-244-6903  
**Muscle Shoals**—Northwest Alabama Council of Local Governments. 205-383-3861  
**Normal**—Department of Community Planning and Urban Studies, Alabama A & M University. 205-851-5425  
**Opelika**—Lee-Russell County Area Council of Governments. 205-749-5264  
**Troy**—Troy State University Library. 205-566-8112  
**Tuscaloosa**—West Alabama Planning and Development Council. 205-345-5545

## ALASKA

### Lead Agency

Kathryn Lizik, State Data Center, Department of Labor, Research and Analysis, P.O. Box 25504, **Juneau**, 99802-5504. 907-465-4500

### Coordinating Agencies

Jim Kerr, Institute for Social and Economic Research, University of Alaska, 3211 Providence Drive, **Anchorage**, 99508. 907-786-7710  
Jack Kreinheder, Office of Management and Budget, Division of Policy, Pouch AD, **Juneau**, 99811. 907-465-3568  
Catherine Gruenberg, Department of Education, Division of Libraries and Museums, Alaska State Library, Pouch G, **Juneau**, 99811-0571. 907-465-2927  
Laura Walters, Department of Community and Regional Affairs, Division of Municipal and Regional Assistance, PO Box BH, **Juneau**, 99811. 907-465-4756

### Affiliates

**Anchorage**—Alaska Department of Labor. 907-264-2400  
Economic Development and Planning Department. 907-343-4222  
**Bethel**—Kuskokawim Consortium Library. 907-543-4516  
**Fairbanks**—Elmer Rasmuson Library, University of Alaska. 907-474-7624  
North Star Borough, Community Research Center. 907-459-1212  
**Homer**—Homer Public Library. 907-235-3180  
**Ketchikan**—Ketchikan Gateway Planning Department. 907-225-6151  
Ketchikan Public Library. 907-225-3331  
**Kodiak**—Legislative Information Office. 907-486-8116

**Nome**—Learning Resource Center, Northwest Community College. 907-443-2201  
**Palmer**—Palmer City Library. 907-745-4690  
MAT-SU Borough Planning. 907-745-9660  
**Petersburg**—Petersburg Public Library. 907-772-3349  
**Sitka**—Sitka Legislative Information Office. 907-747-6276  
**Soldotna**—Kenai Peninsula Borough. 907-262-4441  
**Wrangell**—Irene Ingle Public Library. 907-874-3535

## ARIZONA

### Lead Agency

Betty Jeffries, Arizona Department of Economic Security, 1300 West Washington, SE Wing, Site Code 045Z, P.O. Box 6123, **Phoenix**, 85005. 602-542-5984

### Coordinating Agencies

Dr. Joseph J. Walka, College of Business Administration, Northern Arizona University, Box 15066, **Flagstaff**, 86011. 602-523-3657  
Janet Fisher, Department of Library, Archives, and Public Records, Federal Documents Section, Capitol, 2nd Floor, 1700 West Washington, **Phoenix**, 85007. 602-621-4121  
Tom Rex, Center for Business Research, College of Business Administration, Arizona State University, **Tempe**, 85287. 602-965-3961  
John Prechtel, College of Business and Public Administration, Division of Economic and Business Research, University of Arizona, **Tucson**, 85721. 602-621-2155

### Affiliates

**Bisbee**—Cochise County Library. 602-432-5741  
Southeast Arizona Governments Organization. 602-432-5301  
**Flagstaff**—Flagstaff City/Coconino County Public Library. 602-779-7670  
Northern Arizona Council of Governments. 602-774-1895  
Northern Arizona University Library. 602-523-6805  
**Florence**—Central Arizona Association of Governments. 602-868-5878  
**Kingman**—Mohave County Library District. 602-735-0707  
Western Arizona Council of Governments. 602-753-6247  
**Mesa**—Mesa Public Library. 602-834-2714  
**Miami**—Gila County Public Library. 602-473-2621  
**Nogales**—Nogales/ Santa Cruz County Public Library. 602-287-3343  
**Parker**—Parker/ La Paz County Public Library. 602-669-2644  
**Phoenix**—Arizona Department of Commerce. 602-280-1321  
Indian Development District of Arizona. 602-433-1700

Maricopa County Human Resources Department. 602-261-5911  
Phoenix Public Library. 602-534-0596  
Valle Del Sol. 602-258-6797  
**Prescott**—Yavapai County Library District. 602-771-3191  
**St. Johns**—Apache County Library. 602-337-4405  
**Tempe**—Arizona State University, College of Law Library. 602-965-6141  
Arizona State University, Hayden Library. 602-965-3387  
**Tucson**—Government Documents Library, University of Arizona. 602-621-6433  
Tucson Planning Department Library. 602-791-4234  
Tucson Public Library. 602-791-4041  
**Yuma**—Western Arizona Council of Governments. 602-782-1886  
Yuma County Library District. 602-782-5697

## ARKANSAS

### Lead Agency

Sarah Breshears, State Data Center, University of Arkansas at Little Rock, 2801 South University Avenue, **Little Rock**, 72204. 501-569-8530

### Coordinating Agencies

Mary Honeycutt, Arkansas State Library, 1 Capitol Mall, **Little Rock**, 72201. 501-682-2864  
Coy Cozart, Arkansas Employment Security Division, Research and Analysis Section, P.O. Box 2981, **Little Rock**, 72203. 501-682-3159

### Affiliates

**Batesville**—White River Planning and Development District. 501-793-5233  
White River Regional Library. 501-793-8896  
**Blytheville**—Mississippi County Library. 501-762-2442  
**Dardanelle**—Arkansas River Valley Regional Library. 501-229-4418  
**Fayetteville**—Ozarks Regional Library. 501-442-6253  
**Fort Smith**—Fort Smith Public Library. 501-783-0229  
West Arkansas Planning and Development District. 501-785-2651  
**Harrison**—North Arkansas Regional Library. 501-741-3665  
Northwest Arkansas Economic Development District. 501-741-5404  
**Hope**—Southwest Arkansas Regional Library. 501-777-2957  
**Hot Springs**—West Central Arkansas Planning and Development District. 501-624-1036  
**Jonesboro**—Crowley Ridge Regional Library. 501-935-5133  
East Arkansas Planning and Development District. 501-932-3957

**Little Rock**—Central Arkansas Library System. 501-370-5952  
Metroplan. 501-372-3300  
**Lonoke**—Central Arkansas Planning and Development District. 501-676-2721  
**Magnolia**—Columbia-Lafayette-Quachita-Calhoun Regional Library. 501-234-1991  
Southwest Arkansas Planning and Development District. 501-234-4030  
**Memphis, TN**—MS-AR-TN Council of Governments. 901-576-4610  
**Monticello**—Southeast Arkansas Regional Library. 501-367-8584  
**Pine Bluff**—Public Library of Pine Bluff and Jefferson County. 501-534-4802  
Southeast Arkansas Economic Development District. 501-536-1971  
Southeast Arkansas Regional Planning Commission. 501-534-4247  
**Springdale**—Northwest Arkansas Regional Planning Commission. 501-751-7125  
**Texarkana**—Ark-Tex Council of Governments. 903-832-8636

## CALIFORNIA

### Lead Agency

Linda Gage, State Census Data Center, Department of Finance, 915 L Street, **Sacramento**, 95814. 916-322-4651

### Coordinating Agencies

Ilona Einowski/ Fred Gey, U.C. Data Archive and Technical Assistance, University of California-Berkeley, 2538 Channing Way, **Berkeley**, 94720. 510-642-6571  
Javier Minjares, Southern California Association of Governments, 818 West 7th Street, **Los Angeles**, 90017. 213-236-1800  
Frank Barron, Association of Monterey Bay Area Governments, P.O. Box 838, **Marina**, 93933-0838. 408-883-3750  
Patricia Perry, Association of Bay Area Governments, Metro Center, 8th and Oak Sts., P.O. Box 2050, **Oakland**, 94604-2050. 415-464-7937  
Bob Faseler, Sacramento Area COG, 3000 S. Street, No. 300, **Sacramento**, 95816. 916-441-5930  
Karen Lamphere, San Diego Association of Governments, First Federal Plaza, 401 B Street, Suite 800, **San Diego**, 92101-3585. 619-232-0124

### Affiliates

**Bakersfield**—Kern County COG. 805-861-2191  
**Berkeley**—Institute of Government Studies, University of California-Berkeley. 510-642-6571  
Institute of Government Studies. 415-642-3020  
**Davis**—Institutes of Government Affairs, University of California-Davis. 916-752-2045

**El Centro**—Imperial County Division of Community Development. 619-339-4280  
**Eureka**—Humboldt County Library. 707-445-7284  
**Fresno**—Community Development Office. 209-488-2992  
**Hanford**—Kings County Regional Planning Agency. 209-582-3211 ext. 2674  
**Hayward**—Alameda County Planning Department. 415-670-5400  
**Los Angeles**—Los Angeles County Planning Department. 213-974-6476  
Population Research Laboratory, University of Southern California. 213-743-2950  
United Way of Los Angeles. 213-736-1300  
**Madera**—Madera County Planning Department. 209-675-7821  
**Martinez**—Contra Costa County Planning Department. 415-646-2035  
**Merced**—Merced County Association of Governments. 209-723-3153  
**Modesto**—Stanislaus County Association of Governments. 209-525-7830  
**Monterey**—Association of Monterey Bay Area Governments. 408-373-6116  
**Napa**—City of Napa Planning Department. 707-257-9530  
**Nevada**—Nevada County Planning Department. 916-265-1440  
**Oakland**—Metropolitan Transportation Community. 415-464-7957  
**Oroville**—Butte County Planning Department. 916-538-2140  
**Placerville**—Department of Transportation. 916-621-5982  
**Quincy**—Planning Department. 916-283-0946  
**Red Bluff**—Tehama County Planning Department. 916-527-2200  
**Redding**—Shasta County Planning Department. 916-225-5185  
**Redwood City**—San Mateo County Planning Department. 415-363-4161  
**Riverside**—Riverside County Planning Department. 714-275-1888  
**Rohnert**—Department of American Multi-cultural Studies. 707-664-2968  
**San Bernardino**—San Bernardino County Land Management Department. 714-387-4283  
**San Diego**—Greater San Diego Chamber of Commerce. 619-232-0124  
San Diego County Department of Planning and Land Use. 619-565-3284  
**San Francisco**—San Francisco Department of City Planning. 415-558-6254  
**San Jose**—Santa Clara County Planning Department. 408-299-2521  
**San Luis Obispo**—San Luis Obispo County Planning Department. 805-549-5600  
**Santa Ana**—Orange County Administrative Office. 714-834-3031  
**Santa Barbara**—Santa Barbara County Association of Governments, Area Planning Council. 805-568-2546  
University of California, Geography Department. 805-961-3831  
**Sonora**—Central Sierra Planning Council. 209-532-8768

**Stockton**—San Joaquin County Council of Governments. 209-468-3913  
**Ukiah**—Mendocino County Planning Department. 707-463-4281  
**Ventura**—Ventura County Planning Department. 805-654-3583  
**Visalia**—Tulare County Planning and Development. 209-733-6790  
**Yreka**—Siskiyou County Planning Department. 916-842-8200

**COLORADO**

**Lead Agency**

Reid Reynolds, Colorado Department of Local Affairs, Division of Local Government, 1313 Sherman Street, Rm. 521, **Denver**, 80203. 303-866-2156

**Coordinating Agencies**

Richard Wobbekind, Business Research Division, Graduate School of Business, University of Colorado-Boulder, **Boulder**, 80309. 303-492-8227  
 Sue Anderson, Department of Agriculture, Natural Resources and Economics, Colorado State University, **Fort Collins**, 80523. 303-491-5706  
 Suzanne Taylor, Documents Department, The Libraries, Colorado State University, **Fort Collins**, 80523. 303-491-1800

**Affiliates**

**Alamosa**—San Luis Valley Regional Development and Planning Commission, 719-589-7925  
**Aurora**—Aurora Public Business Resource Library. 303-340-2290  
**Boulder**—Norlin Library, University of Colorado. 303-492-8834  
**Canon City**—Upper Arkansas Area Council of Governments. 719-275-4191  
**Colorado Springs**—Pikes Peak Area Council of Governments. 719-471-7080  
 Pikes Peak Library District. 719-473-2080  
 University of Colorado Library. 719-593-3175  
**Craig**—Craig-Moffat County Library. 303-824-5116  
**Denver**—Auraria Library and Media Center. 303-556-3532  
 Colorado Highway Department, Division of Transportation Planning. 303-757-9756  
 Colorado Supreme Court Library. 303-861-1111 ext. 172  
 Denver Public Library. 303-571-2131  
 Denver Regional Council of Governments. 303-455-1000  
 Division of Health Policy Planning and Statistics, Department of Health. 303-320-8475  
 Latin American Research and Service Agency. 303-839-8300  
 University of Denver Penrose Library. 303-871-2212  
**Durango**—Durango Public Library. 303-247-2492  
 Fort Lewis College Library. 303-247-7252

**Fort Collins**—Larimer County Planning. 303-221-7000.  
**Fort Morgan**—Northeastern Colorado Association of Local Governments. 303-867-9409  
**Frisco**—Northwest Colorado Council of Governments. 303-573-7611  
**Golden**—Arthur Lakes Library-Colorado School of Mines. 303-273-3695  
**Grand Junction City**—Mesa County Library. 303-243-4783  
**Greeley**—Michener Library. 303-351-1528  
**Gunnison**—Leslie Savage Library, Western State College. 303-943-2860  
**Lakewood**—Jefferson County Library. 303-232-7833  
**La Junta**—Woodruff Memorial Library. 719-384-4612  
**Lamar**—Lamar Community College Library. 303-336-2248  
**Littleton**—Arapahoe Regional Library District. 303-798-2441  
**Montrose**—District 10 Regional Planning Commission. 303-249-2436  
**Pueblo**—Pueblo City Planning Department. 719-543-6006  
 Pueblo Library District. 719-543-9601  
 University of Southern Colorado Library. 719-549-2451  
**Rifle**—Associated Governments of Northwest Colorado. 303-625-1723  
**Stratton**—East Central Council of Governments. 303-348-5562  
**Trinidad**—Huerfano-Las Animas Council of Governments. 719-846-4401

**CONNECTICUT**

**Lead Agency**

James G. Palma, Policy Development and Planning Division, Connecticut Office of Policy and Management, 80 Washington Street, **Hartford**, 06106-4459. 203-566-8285. (SDC/ BIDD)

**Coordinating Agencies**

Albert Palko, Government Documents, Connecticut State Library, 231 Capitol Avenue, **Hartford**, 06106. 203-566-4971  
 Jeff Blodgett, Connecticut Department of Economic Development, 865 Brook Street, Building No. 1, **Rocky Hill**, 06067. 203-258-4239  
 Richard Vannuccini, Research and Information, Employment Security Division, Connecticut Department of Labor, 200 Folly Brook Boulevard, **Wethersfield**, 06109. 203-566-2120

**Affiliates**

**Bridgeport**—Bridgeport Regional Business Council. 203-335-3800. (BIDD)  
 Greater Bridgeport Regional Planning Agency. 203-366-5405  
 Southwestern Connecticut Area Agency on Aging. 203-333-9288  
**Bristol**—Central Connecticut Regional Planning Agency. 203-589-7820

**Brookfield Center**—Housatonic Valley Council of Elected Officials. 203-775-6256  
**Brooklyn**—Northeastern Connecticut Council of Governments. 203-774-1253  
**Derby**—Valley Regional Planning Agency. 203-735-8688  
**East Norwalk**—South Western Regional Planning Agency. 203-866-5543  
**Goshen**—Litchfield Hills Council of Elected Officials. 203-491-9884  
**Hartford**—Capitol Region Council of Governments. 203-522-2217  
 Connecticut Business and Industry Association. 203-547-1661. (BIDD)  
 Institute for Community Research. 203-278-2044.  
**Manchester**—Business Services Network, Community College of Connecticut. 203-647-6065. (BIDD)  
**Meriden**—Greater Meriden Chamber of Commerce. 203-235-7901. (BIDD)  
**Middletown**—Middlesex County Chamber of Commerce. 203-347-6924. (BIDD)  
 Midstate Regional Planning Agency. 203-347-7214  
**New Haven**—Greater New Haven Chamber of Commerce. 203-787-6735. (BIDD)  
**New London**—Chamber of Commerce of Southeastern Connecticut. 203-443-8332. (BIDD)  
**North Haven**—South Central Regional Council of Governments. 203-234-7555  
**Norwich**—Eastern Connecticut Area Agency on Aging. 203-887-3561  
 Southeastern Connecticut Regional Planning Agency. 203-889-2324  
**Old Saybrook**—Connecticut River Estuary Regional Planning Agency. 203-388-3497  
**Southington**—Greater Southington Chamber of Commerce. 203-628-8036. (BIDD)  
**Warren**—Northwestern Connecticut Council of Governments. 203-868-7341  
**Waterbury**—Council of Governments of the Central Naugatuck Valley. 203-757-0535  
 Greater Waterbury Chamber of Commerce. 203-757-0701. (BIDD)  
 Western Connecticut Area Agency on Aging. 203-757-5449  
**Williamantic**—Windham Regional Planning Agency. 203-456-2221

**DELAWARE**

**Lead Agency**

Judy McKinney-Cherry, Delaware Development Office, 99 Kings Highway, P.O. Box 1401, **Dover**, 19903. 302-739-4271. (SDC/ BIDD)

**Coordinating Agency**

Ed Ratledge, College of Urban Affairs and Public Policy, University of Delaware, Graham Hall, Room 286, Academy Street, **Newark**, 19716. 302-451-8406

**Affiliates**

**Dover**—Central Delaware Chamber of Commerce. 302-678-0892  
 Forward Central Delaware. 302-678-3028  
 Delaware League of Local Governments. 302-678-0991  
 Delaware State Library. 302-739-4748  
**Georgetown**—Delaware Technical and Community College. 302-856-9033  
**Newark**—Computer Center, University of Delaware. 302-451-8441  
 Delaware Department of Labor, Office of Occupational and Labor Market Information. 302-368-6962  
 Department of Food and Resources Economics, University of Delaware. 302-451-2511  
 Wilmington Metro Planning/ Coordinating Council. 302-737-6205  
**Seaford**—Greater Seaford Chamber of Commerce. 302-629-9690  
**Wilmington**—Delaware Chamber of Commerce. 302-655-7221

**DISTRICT OF COLUMBIA**

**Lead Agency**

Gan Ahuja, Mayor's Office of Planning, Data Services Division, Rm. 570, Presidential Bldg., 415 12th Street, NW., **Washington**, 20004. 202-727-6533

**Coordinating Agency**

Robert Griffiths/ Jenean Johanningmeier, Metropolitan Washington Council of Governments, Suite 300, 777 North Capitol Street, NE., **Washington**, 20002-4201. 202-962-3200

**Affiliates**

Business Division, Martin Luther King Memorial Library. 202-727-1171  
 District of Columbia Chamber of Commerce. 202-347-7202  
 Gallaudet University Library. 202-651-5214  
 Mount Vernon College. 202-331-3545  
 National Capitol Planning Commission. 202-724-0210  
 Research and Statistics Division, Department of Human Services. 202-727-0682  
 Sociology/ Anthropology, Research Laboratory, Howard University. 202-806-6853  
 United Planning Organization. 202-546-7300  
 Washington Division, Martin Luther King Memorial Library. 202-727-1199

**FLORIDA**

**Lead Agencies**

Steve Kimble, Florida State Data Center, Executive Office of the Governor, Office of Planning and Budgeting, The Capitol, **Tallahassee**, 32399-0001. 904-487-2814

Amy Schmeling, Bureau of Economic Analysis, Florida Department of Commerce, 315 Collins Building, 107 West Gaines Street, **Tallahassee**, 32399-2000. 904-487-2971. (BIDC)

**Coordinating Agency**

Dr. Ike Eberstein, Center for the Study of Population, Institute for Social Research, Florida State University, 654 Bellamy Building, **Tallahassee**, 32306-4063. 904-644-1762  
 Lisa Close, State Library of Florida, R.A. Gray Building, **Tallahassee**, 32399-0250. 904-487-2651

**Affiliates**

**Alachua**—NASA-Southern Technology Applications Center. 904-462-3926. (BIDC)  
**Bartow**—Central Florida Regional Planning Council. 813-534-7130  
**Boca Raton**—Stuart-James Research Center, Florida Atlantic University. 407-367-3805. (BIDC)  
**Bradenton**—Manatee County Economic Development Council. 813-748-3411. (BIDC)  
**Coral Gables**—University of Miami Law and Economic Center. 305-284-6174. (SDC/ BIDC)  
**Fort Walton Beach**—Greater Fort Walton Beach Chamber of Commerce. 904-244-8191. (BIDC)  
**Gainesville**—North Central Florida Regional Planning Council. 904-336-2200  
 University of Florida Library. 904-392-0363  
**Hollywood**—South Florida Regional Planning Council. 305-961-2999. (SDC/ BIDC)  
**Jacksonville**—Northeast Florida Regional Planning Council. 904-363-6350. (SDC/ BIDC)  
**Jensen Beach**—Treasure Coast Private Industry Council 407-692-1500. (BIDC)  
**Miami**—Libraries, Florida International University. 305-348-2463. (SDC/ BIDC)  
 Metropolitan Dade County Planning Department. 305-375-2845  
**Naples**—Economic Development Council of Collier County, Inc. 813-263-8989. (BIDC)  
**North Fort Myers**—Southwest Florida Regional Planning Council. 813-995-4282. (SDC/ BIDC)  
**Ocala**—Economic Development Council of Ocala. 904-629-2757. (BIDC)  
 Withlacoochee Regional Planning Council. 904-732-1315  
**Orlando**—Economic Development Commission of Mid-Florida. 407-422-7159. (BIDC)  
 University of Central Florida Library. 407-823-2593. (SDC/ BIDC)  
**Palatka**—Putnam County Chamber of Commerce 904-328-1503. (BIDC)  
**Palm City**—Treasure Coast Regional Planning Council. 407-221-4060

**Panama City**—Bay County Public Library. 904-785-3457  
**Pensacola**—Florida Small Business Development Centers, University of West Florida. 904-433-1459. (BIDC)  
 University of West Florida, Center for State and Local Government. 904-474-2367  
 West Florida Regional Planning Council. 904-433-1459  
**St. Petersburg**—Tampa Bay Regional Planning Council. 813-577-5151  
**Tallahassee**—Advisory Council on Intergovernmental Relations, Florida Legislature. 904-488-9627  
 Associated Industries of Florida. 904-224-7173. (BIDC)  
 College of Social Sciences, Florida State University. 904-644-2834  
 Computing Center, Florida State University. 904-644-2591. (SDC/ BIDC)  
 Department of Transportation. 904-487-1970  
 Division of Economic and Demographic Research, The Florida Legislature. 904-487-1402  
 Division of Marketing, Florida Department of Agriculture. (BIDC)  
 Florida Chamber of Commerce. 904-222-2831. (SDC/ BIDC)  
 Florida Economic Development Center, Florida State University. 904-644-1044. (BIDC)  
 Department of Labor and Employment Security. 904-488-1048.  
 Florida League of Cities. 904-222-9684  
 Florida Retail Federation. 904-222-4082. (BIDC)  
 Kurt A. Spitzer and Associates. 904-224-3148  
 Tallahassee Area Chamber of Commerce. 904-224-8116. (BIDC)  
**Tampa**—Center for Economic and Management Research. (BIDC)  
 College of Business Administration, Management Institute, University of South Florida. 813-974-4264  
 Tampa Committee of One Hundred. 813-228-7777. (BIDC)  
**West Palm Beach**—Palm Beach County Development Board. 407-684-2401. (BIDC)  
**Winter Park**—East Central Florida Regional Planning Council. 305-623-1075

**GEORGIA**

**Lead Agency**

Marty Sik, Division of Demographic and Statistical Services, Georgia Office of Planning and Budget, 254 Washington Street, S.W., Rm. 640, **Atlanta**, 30334. 404-656-0911

**Coordinating Agencies**

Juanita Miller, Documents Librarian, Albany State College, 504 College Drive, **Albany**, 31705. 912-430-4799

Dr. Hortense Bates, Data Services, University of Georgia Libraries, 6th Floor, **Athens**, 30602. 404-542-0727

Susan C. Field, Main Library, University of Georgia, **Athens**, 30602. 404-542-0664

Gayle Christian, Documents Librarian, Georgia State University, University Plaza, **Atlanta**, 30303. 404-651-2185

Elizabeth McBride, Robert W. Woodruff Library for Adv. Studies, Emory University, **Atlanta**, 30322. 404-727-6880

Phil Thiel, Office of Coordinated Planning, Georgia Department of Community Affairs, 100 Peachtree Street, N.E., Suite 1200, **Atlanta**, 30303-1901. 404-656-5526

Richard Leacy, Head, Government Information Dept., Price Gilbert Memorial Library, Georgia Institute of Technology, **Atlanta**, 30332. 404-894-4519

Ismael Gullon, Law Library, Mercer University, 1021 Georgia Avenue, **Macon**, 31207. 912-752-2668

Lynn Walshak, Head of Governments Documents, Georgia Southern College, **Statesboro**, 30460. 912-681-5117

#### Affiliates

**Athens**—Northeast Georgia RDC. 404-369-5650

**Atlanta**—Atlanta Regional Commission. 404-364-2531

Board of Regents System, University of Georgia. 404-656-2213

Georgia Health Planning. 404-320-4833

**Augusta**—Central Savannah River RDC. 404-737-1823

**Barnesville**—McIntosh Trail RDC. 404-358-3647

**Baxley**—Altamaha Georgia Southern RDC. 912-367-3648

**Brunswick**—Coastal RDC. 912-264-7363

**Camilla**—Southwest Georgia RDC. 912-336-5616

**Columbus**—Lower Chattahoochee RDC. 404-571-7468

**Dalton**—North Georgia RDC. 404-272-2300

**Douglas**—Library, South Georgia College. 912-383-4290

**Eastman**—Heart of Georgia RDC. 912-374-4771

**Ellaville**—Middle Flint RDC. 912-937-2561

**Fort Valley**—Library, Fort Valley State College. 912-825-6342

**Franklin**—Chattahoochee Flint RDC. 404-522-4024

**Gainesville**—Georgia Mountains RDC. 404-536-3431

**Macon**—Middle Georgia RDC. 912-751-6160

**Milledgeville**—Oconee RDC. 912-453-5327

**Rome**—Coosa Valley RDC. 404-295-6485

**Savannah**—Library, Savannah State College. 912-356-2185

**Valdosta**—South Georgia RDC. 912-333-5277

**Waycross**—Southeast Georgia RDC. 912-285-6097

## GUAM

### Lead Agency

Peter R. Barcinas, Guam Department of Commerce, 590 South Marine Drive, Suite 601, 6th Floor GITC Bldg., **Tamuning**, 96911. 671-646-5841

### Affiliates

**Agana**—Nieves M Flores Memorial Library. 671-472-6417

Bureau of Planning. 671-472-4201

**Mangilao**—College of Agriculture and Life Sciences, Cooperative Extension Service, University of Guam. 671-734-2506

Computer Center, University of Guam. 671-734-3500

Micronesian Area Research Center, University of Guam. 671-734-4473

Robert F. Kennedy Library, University of Guam. 671-734-2482

**Tamuning**—Department of Labor. 671-646-9241

## HAWAII

### Lead Agency

Jan NaKamoto, Department of Business and Economic Development, 220 South King Street, P.O. Box 2359, **Honolulu**, 96804. 808-548-3082

### Coordinating Agencies

Joy Toyama, Information and Communication Services Division, Department of Budget and Finance, 1151 Punchbowl Street, **Honolulu**, 96813. 808-548-6180

### Affiliates

**Hawaii**—Hawaii County Department of Research and Development, Hilo. 808-961-8366

Library, University of Hawaii-Hilo. 808-933-3525

Learning Resources Center, Kauai Community College, Lihue. 808-245-8233

**Maui**—County of Maui, Department of Planning, Wailuku. 808-243-7735

Department of Human Concerns, Wailuku. 808-243-7710

Maui Community College Library, Kahului. 808-242-1233

**Molokai**—Molokai Branch Library, Kaunakakai. 808-553-5483

**Oahu**—Alu Like Inc., Honolulu. 808-836-8940

City and County of Honolulu, Department of General Planning, Honolulu. 808-527-6080

Department of Health, Honolulu. 808-586-4600.

Department of Human Services, Honolulu. 808-548-5753

East-West Center, Honolulu. 808-944-7451

Executive Office on Aging, Honolulu. 808-548-2593

Government Documents, University of Hawaii at Monoa, Honolulu. 808-948-8230.

Hamilton Library, University of Hawaii at Monoa, Honolulu. 808-948-8264

Hawaii Chamber of Commerce, Honolulu. 808-522-8805

Hawaii Documents Center, Hawaii State Library, Honolulu. 808-548-2344

Library, Hawaii Department of Business and Economic Development, Honolulu. 808-548-3059

Oahu Metropolitan Planning Organization, Honolulu. 808-548-2638

Office of Hawaiian Affairs, Honolulu. 808-946-2642

Office of the Lieutenant Governor, Honolulu. 808-548-2517

Social Science Research Institute, University of Hawaii, Honolulu. 808-948-7342

## IDAHO

### Lead Agency

Alan Porter, Department of Commerce, 700 W. State Street, **Boise**, 83720. 208-334-2470

### Coordinating Agencies

Don Canning, Institutional Research Center, Boise State University, Rm.319, Business Building, **Boise**, 83725. 208-385-1613

Stephanie Nicholas, Idaho State Library, 325 West State Street, **Boise**, 83702. 208-334-2150

Dr. Paul Zelus, Center for Business Research and Services, Idaho State University, Campus Box 8450, **Pocatello**, 83209. 208-236-2504

### Affiliates

**Boise**—ADA Planning Association. 208-345-5274

Boise City Library. 208-384-4023

Boise State University Library. 208-385-1264

IDA-ORE Regional Planning and Development Association. 208-322-7033

**Caldwell**—Terteling Library, College of Idaho. 208-459-5505

**Hayden**—Panhandle Area Council. 208-772-0584

**Idaho Falls**—Idaho Falls Public Library. 208-529-1451

**Lewiston**—Clearwater Economic Development Association. 208-746-0015

Lewis-Clark State College Library. 208-799-2227

**Moscow**—Library, University of Idaho. 208-885-6344

**Pocatello**—Library, Idaho State University. 208-236-2940

Southeast Idaho Council of Governments. 208-233-4032

**Rexburg**—East Central Idaho Planning and Development Association. 208-356-4524

McKay Library, Ricks College. 208-356-2366

**Twin Falls**—Region IV Development Association. 208-734-6586  
Twin Falls Public Library. 208-733-2964

## ILLINOIS

### Lead Agency

Sue Ebetsch, Illinois State Data Center, Illinois Bureau of the Budget, William Stratton Bldg., Rm. 605, **Springfield**, 62706. 217-782-1381

### Coordinating Agencies

Jim Bash, Chicago Area Geographic Information Study, University of Illinois at Chicago, Rm. 2102, Bldg. BSB M/C 092, Box 4348, **Chicago**, 60680. 312-996-6367

Max Dieber and Mary Cele Smith, Northeastern Illinois Planning Commission, Research Services Dept. 400 West Madison Street, **Chicago**, 60606-2642. 312-454-0400

Ruth Anne Tobias, Center for Governmental Studies, Northern Illinois University, Social Science Research Bldg., **DeKalb**, 60115. 815-753-1901

Charles Kofron, Regional Research and Development Services, Southern Illinois University-Edwardsville, Box 1456, **Edwardsville**, 62026-1456. 618-692-3500

Dr. Roy Treadway, Census and Data Users Services, Illinois State University, Dept. 4960, Research Services Bldg. Suite A, **Normal**, 61761-6901. 309-438-5946

### Affiliates

**Albion**—Greater Wabash Regional Planning Commission. 618-445-3612

**Bloomington**—McLean County Regional Planning Commission. 309-828-4331

**Carbondale**—Greater Egypt Regional Planning and Development Commission. 618-549-3306

Office of Regional Research and Development, Southern Illinois University. 618-453-6759

**Carlinville**—West Central Illinois Valley Regional Planning. 217-854-9642

**Chicago**—City of Chicago, Department of Planning. 312-744-4455

**Clinton**—DeWitt County Planning and Zoning Department. 217-935-5917

**Collinsville**—Southwestern Illinois Metropolitan and Regional Planning Commission. 618-344-4250

**Decatur**—Macon County Regional Planning Commission. 217-424-1466

**Effingham**—Helen Matthes Library. 217-342-2464

**Harrisburg**—Southeastern Illinois Regional Planning and Development Commission. 618-252-7463

**Kankakee**—Kankakee County Regional Planning Commission. 815-937-2940

**Lincoln**—Logan County Regional Planning Commission. 217-732-8835

**Macomb**—Economic and Community Development, Western Illinois Regional Council. 309-837-3941

**Morris**—Grundy County Regional Planning Commission. 815-942-9024

**Morton**—Tri-County Regional Planning Commission. 309-266-9941

**Princeton**—North Central Illinois Council of Governments. 815-875-3396

**Quincy**—Two Rivers Regional Council of Public Officials. 217-224-8171

**River Forest**—CENSURCH, Concordia University. 708-209-3020

**Rock Island**—Bi-State Metropolitan Planning Commission. 309-793-6300

**Rockford**—Health Services Research, University of Illinois, College of Medicine. 815-395-5639

**Salem**—South Central Illinois Regional Planning and Development Commission. 618-548-4234

**Springfield**—Brookens Library, Sangamon State University. 217-786-6633  
Springfield and Sangamon County Regional Planning Commission. 217-525-2132

**St. Louis, Missouri**—East-West Gateway Coordinating Council. 314-421-4220

**Ullin**—Southern Five Regional Planning Commission. 618-634-2284

**Urbana**—Champaign County Regional Planning Commission. 217-328-3313

## INDIANA

### Lead Agencies

Roberta Eads, Indiana State Data Center, Indiana State Library, 140 North Senate Avenue, **Indianapolis**, 46204. 317-232-3733

Carol Rogers, Indiana Business Research Center, Indiana University, 801 W. Michigan, B.S. 4013, **Indianapolis**, 46202-5151. 317-274-2205. (BIDC)

### Coordinating Agencies

Morton Marcus, Indiana Business Research Center, Indiana University, **Bloomington**, 47405. 812-855-5507

Robert Lain, Division of Economic Analysis, Indiana Department of Commerce, 1 North Capitol, **Indianapolis**, 46204. 317-232-8959

### Affiliates

**Anderson**—Anderson Public Library. 317-641-2456

**Bloomington**—Bloomington Chamber of Commerce. 812-336-6381. (BIDC)  
Stone Hills ALSA-Area 10, Monroe County Public Library. 812-339-2271

**Carmel**—Carmel Clay Public Library. 317-844-3361. (BIDC)

**Columbus**—Area XI Agency on Aging. 812-372-6918

Columbus-Bartholomew Planning Department. 812-376-2550

**Elkhart**—Elkhart Public Library. 219-552-3333. (BIDC)

**Evansville**—Evansville Area Planning Commission. 812-426-5226  
Four Rivers ALSA-Area 13, Evansville Public Library. 812-428-8218

**Fort Wayne**—Northeastern Indiana Regional Coordinating Council. 219-428-7309

TRI-ALSA, Allen County Public Library. 219-424-6664

**Franklin**—Franklin-Johnson County Public Library. 317-738-2833. (BIDC)

**Highland**—Northwest Indiana Regional Planning Commission. 219-923-1060

**Huntingburg**—Indiana 15 Regional Planning Commission. 812-683-4647

**Indianapolis**—Association of Indiana Counties. 317-684-3710. (BIDC)

Indiana Chamber of Commerce. 317-634-6407. (BIDC)

Indianapolis Chamber of Commerce. 317-464-2242. (BIDC)

Indianapolis-Marion County Public Library, CIALSA. 317-269-1733

Planning Department, Community Service Council. 317-923-1466

Association of Cities and Towns. 317-237-6200

**Jeffersonville**—River Hills Economic Development District. 812-288-4624

**Kendallville**—Region 3-A Development District and Regional Planning Commission. 219-347-4714

**Lafayette**—Tippecanoe Area Planning Commission. 317-423-9242

Tippecanoe County Public Library. 317-423-2602. (BIDC)

Wabash Valley Library Network. 317-429-0250

Greater Lafayette Progress, Inc. 317-742-0095

**Loogootee**—Southern Indiana Development Commission. 812-295-3707

**Marion**—Marion Public Library 317-664-7363. (BIDC)

Area Planning Department of Grant County. 317-668-8871

**Merrillville**—Lake County Public Library. 219-769-3541. (BIDC)

Northwest Indiana ALSA. 219-736-0631

**Mishawaka**—ALSA 2 Reference Center, Mishawaka-Penn Public Library. 219-678-2572 or 1-800-678-2572

**Monon**—Kankakee Iroquois Regional Planning Commission. 219-253-6658

**Muncie**—College of Business, Business Research Bureau, Ball State University. 317-285-5926

EIALSA, Muncie Public Library. 317-286-8935

**New Albany**—SIALSA. 812-948-8639 or 1-800-892-2740

**Richmond**—Morrison-Reeves Public Library. 317-966-8291

**South Bend**—Michiana Council Of Governments. 219-287-1829

**Terre Haute**—Stone Hills ALSA Reference Center, Vigo County Public Library. 812-232-1113 or 1-800-457-0512 (SDC/ BIDC)

Terre Haute SBDC, Center for Management. 812-237-3232

West Central Indiana Economic Development District. 812-238-1561

**Versailles**—Southeastern Indiana Regional Planning Commission. 812-689-5505

**Vincennes**—Knox County Public Library. 812-886-4380. (BIDC)

Vincennes Area Chamber of Commerce. 812-882-6440. (BIDC)

**West Lafayette**—Center for Rural Development, Purdue University. 317-494-4312. (BIDC)

## IOWA

### Lead Agency

Beth Henning, State Library of Iowa, East 12th and Grand, **Des Moines**, 50319. 515-281-4350

### Coordinating Agencies

Dr. Willis Goudy, Census Services, Iowa State University, 320 East Hall, **Ames**, 50011. 515-294-8337

Iowa Department of Economic Development, Research Section, 200 East Grand Avenue, **Des Moines**, 50309. 515-281-3005

Dr. Robert Kramer, Center for Social and Behavioral Research, University of Northern Iowa, **Cedar Falls**, 50614. 319-273-2105

Steve Boal, Department of Education, Census Data Center, Grimes State Office Bldg., **Des Moines**, 50319. 515-281-4730

Brian Dalziel, Iowa Social Science Institute, 345 Shaeffer Hall, University of Iowa, **Iowa City**, 52242. 319-335-2371

### Affiliates

**Atlantic**—Southwest Iowa Area Extension Office, Southwest Iowa Planning Council. 712-243-5750

**Burlington**—Southeast Iowa Regional Planning Commission. 319-753-5107

**Carroll**—Region XII Council of Governments. 712-792-9914

**Cedar Rapids**—East Central Iowa Area Extension Office. 319-398-2040  
East Central Iowa COG. 319-398-3666  
Learning Resource Center, Kirkwood Community College. 319-398-5553

**Conrad**—Conrad Public Library. 515-366-2583

**Creston**—Southern Iowa Council of Governments. 515-782-8491

**Des Moines**—Department of Human Services. 515-281-6094  
Small Business Development Center, College of Business, Drake University. 515-271-2655

**Dubuque**—East Central Intergovernmental Association. 319-556-4166

**Fairfield**—Fairfield Public Library. 515-472-6551

**Fort Dodge**—Mid-Iowa Development Association COG. 515-576-7183

**Iowa City**—Iowa City Public Library. 319-356-5206

**Iowa Falls**—Iowa Falls Public Library. 515-648-2872

**Marshalltown**—Region Six Planning Commission. 515-752-0717

**Mason City**—North Central Iowa Area Extension Office. 515-424-5432  
Northern Iowa COG. 515-423-0491

**Nashua**—Nashua Public Library. 515-435-4635

**Oskaloosa**—Oskaloosa Public Library. 515-673-0441

**Ottumwa**—Area XV Regional Planning Commission. 515-684-6551  
Southeast Iowa Area Extension Office. 515-682-8324

**Postville**—Upper Explorerland Regional Planning Commission. 319-864-7551

**Red Oak**—Red Oak Public Library. 712-623-3570

**Rock Island, IL**—Bi-State Metropolitan Planning Commission. 309-793-6300

**Sioux City**—Siouxland Interstate Metropolitan Planning Council. 712-279-6286

**Spencer**—Northwest Iowa Planning and Development Commission. 712-262-7225

**Storm Lake**—Ballou Library, Buena Vista College. 712-749-2203  
Northwest Iowa Area Extension Office. 712-732-2584

**Urbandale**—Central Iowa Area Extension Office. 515-270-8114

**Waterloo**—Iowa Northland Regional COG. 319-235-0311

Northeast Iowa Area Extension Office. 319-232-6654

Waterloo Public Library. 319-291-4476

## KANSAS

### Lead Agency

Marc Galbraith, State Library, State Capitol Bldg., Rm. 343-N, **Topeka**, 66612. 913-296-3296

### Coordinating Agencies

Thelma Helyar, Institute for Public Policy and Business Research, 607 Blake Hall, University of Kansas, **Lawrence**, 66045-2960. 913-864-3123

Dr. Jan L. Flora, Population and Resources Laboratory, Department of Sociology, Kansas State University, **Manhattan**, 66506. 913-532-5984

Teresa Floerchinger, Division of the Budget, State Capitol Bldg., Rm. 152E, **Topeka**, 66612. 913-296-2436

Janet Nickel, Kansas State Data Center, Center for Economic Development and Business Research, Box 48, Wichita State University, **Wichita**, 67208-9988. 316-689-3225

### Affiliates

**Dodge City**—Dodge City Public Library. 316-225-0248

**Great Bend**—Great Bend Public Library. 316-792-2409  
Library, Barton County Community College. 316-792-2701 ext. 277

**Lawrence**—Lawrence Public Library. 913-843-3833

**Lindsborg**—Sociology Department, Bethany College. 913-227-3311

**Manhattan**—Kansas State University, Extension Comm. Development Office. 913-532-5840

**Norton**—Northwest Kansas Library System. 913-877-5148

**Overland**—CERI Johnson County Economic Research Institute. 913-599-1616

**Salina**—Salina Public Library. 913-825-4624

**Topeka**—Department of Economic Development. 913-296-3486

Kansas Department of Health and Environment. 913-296-1550

Topeka Public Library. 913-233-2040

Wichita Public Library. 316-262-0611

Wichita/Sedgwick Metropolitan Area Planning Department. 316-268-4122

## KENTUCKY

### Lead Agency

Ron Crouch, Director, Kentucky State Data Center, Urban Research Institute, University of Louisville, **Louisville**, 40292. 502-588-7990. (SDC/ BIDC)

### Coordinating Agencies

William Hintze, Office of Policy and Management, State of Kentucky, Capitol Annex, **Frankfort**, 40601. 502-564-7300

Brenda Fuller, State Library Division, Department for Libraries and Archives, 300 Coffee Tree Road, **Frankfort**, 40601. 502-875-7000

### Affiliates

**Ashland**—Boyd County Library. 606-329-0090

**Boyd**—Greenup County Small Business Development Center. 606-329-8011. (BIDC)

**Bardstown**—Nelson County Public Library. 502-348-3714

**Bowling Green**—Barren River ADD. 502-781-2381

Western Kentucky University, Helm-Cravens Library 700. 502-745-2097

Bowling Green Small Business Development Center. 502-745-2901. (BIDC)

**Catlettsburg**—FIVCO ADD. 606-739-5191

**Cincinnati, OH**—OKI Regional COG. 513-621-7060

**Covington**—Kenton County Public Library. 606-491-7610

**Cumberland**—Southeast Community College. 606-589-4514. (BIDC)

**Elizabethtown**—Hardin County Public Library. 502-769-6337

Elizabeth Small Business Development Center. 502-765-6737. (BIDC)

**Florence**—Boone County Public Library. 606-371-6222

Northern Kentucky ADD. 606-283-1885

**Frankfort**—Department of Business Development. 502-564-4881. (BIDC)

Kentucky Chamber of Commerce. 502-695-4700 (BIDC)

**Hazard**—Kentucky River ADD. 606-436-3158

**Highland Heights**—Northern Kentucky University, W. Frank Steely Library. 606-572-5683

Northern Kentucky University, Small Business Development Center. 606-572-6558. (BIDC)

**Hopkinsville**—Pennyrite ADD. 502-886-8666

Hopkinsville Small Business Development Center. 502-886-8066. (BIDC)

**LaGrange**—Duerson Oldham Public Library. 502-222-1133

**Leitchfield**—Grayson County Public Library. 502-259-5455

**Lexington**—Bluegrass ADD. 606-272-6656

College for Business and Economic Research. 606-257-7678. (BIDC)

Lexington Public Library. 606-231-5523

University of Kentucky, Central Kentucky Small Business Development Center. 606-257-7666. (BIDC)

University of Kentucky, Kentucky Small Business Development Center. 606-257-7668. (BIDC)

**London**—Cumberland Valley ADD. 606-864-7391

**Louisville**—Kentuckiana Planning and Development Agency ADD. 502-266-6084

Louisville Chamber of Commerce. 502-566-5031 (BIDC)

Small Business Development Center, Belknap College. 502-452-8282. (BIDC)

University of Louisville, Bureau of Economic Research. 502-588-7304. (BIDC)

University of Louisville, Center for Entrepreneurship and Technology. 502-588-7854. (BIDC)

**Mayfield**—Purchase ADD. 502-247-7171

**Maysville**—Buffalo Trace ADD. 606-564-6894

**Morehead**—Morehead State University, Small Business Development Center. 606-783-2895. (BIDC)

**Murray**—Murray State University, West Kentucky Small Business Development Center. 502-762-2856. (BIDC)

**Cold Springs**—Cold Springs Branch Public Library. 606-291-4770

**Owensboro**—Kentucky Wesleyan College Library. 502-926-3111 ext. 113

Owensboro Chamber of Commerce. 502-926-1860

Owensboro Small Business Development Center. 502-926-8085. (BIDC)

**Owingsville**—Gateway ADD. 606-674-6355

**Pikeville**—Pikeville Small Business Development Center. 606-432-4548. (BIDC)

**Prestonburg**—Big Sandy Area Development District. 606-886-2374

Big Sandy Regional Library. 606-886-6311

**Russell Springs**—Lake Cumberland ADD. 502-866-4200

**Shelbyville**—Shelby County Public Library. 502-633-3803

**Shepherdsville**—Ridgeway Memorial Library. 502-543-7675

**Somerset**—Eastern Kentucky University, South Central Small Business Development Center. 606-678-5520

## LOUISIANA

### Lead Agency

Karen Paterson, Office of Planning and Budget, Division of Administration, 900 Riverside, P.O. Box 94095, **Baton Rouge**, 70804. 504-342-7410

### Coordinating Agencies

Blache Cretini, Reference Department, Louisiana State Library, P.O. Box 131, **Baton Rouge**, 70821. 504-342-4918

Pete McCool, Center for Life Cycle and Population Studies, Department of Sociology, Louisiana State University, R 126, Stubbs Hall, **Baton Rouge**, 70803-5411. 504-388-5359

Kay McGinness, Louisiana State Planning Office, Library, P.O. Box 94095, **Baton Rouge**, 70804. 504-342-7410

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Dr. Edward O'Boyle, Division of Business Research, Louisiana Tech University, P.O. Box 10318, **Ruston**, 71272. 318-257-3701

### Affiliates

**Alexandria**—Alexandria-Pineville Chamber of Commerce. 318-442-6671

Kisatchie Delta Regional Planning and Development District. 318-487-5454

Rapides Area Planning Commission. 318-487-5401

**Baton Rouge**—Baton Rouge Chamber of Commerce. 504-387-1400

Capitol Regional Planning Commission. 504-383-5203

Center for Social Research, Sociology Department, Southern University. 504-771-5095.

Department of Education, Research Library. 504-342-3734

Department of Environmental Quality. 504-342-9103

Department of Health and Hospitals. 504-342-1276

E. Baton Rouge Parish Library. 504-389-3370

Legislative Research Library. 504-342-2434

Louisiana Department of Commerce Information Services. 504-342-5410

Office of Employment Security, Division of Research and Statistics. 504-342-3143

**Jefferson**—Jefferson Parish Planning Department. 504-736-6320

**Lafayette**—Evangeline Economic and Planning District. 318-233-3215

Lafayette Economic Development Authority. 318-234-2986

**Lake Charles**—Imperial Calcasieu Regional Planning and Development Commission. 318-433-1771

Lake Charles Chamber of Commerce. 318-433-3632

**Monroe**—North Delta Regional Planning and Development District. 318-387-2572

**New Orleans**—City of New Orleans Data Analysis Unit. 504-565-6988

New Orleans Chamber of Commerce. 504-527-6955

Regional Planning Commission. 504-568-6611

**Shreveport**—Coordinating and Development Council of Northwest Louisiana. 318-226-7557

Shreveport Area Council of Governments. 318-424-6488

Shreveport Chamber of Commerce. 318-226-8521

**Thibodaux**—South Central Planning and Development Commission. 504-446-0514

## MAINE

### Lead Agency

Jean Martin, Division of Economic Analysis and Research, Maine Department of Labor, 20 Union Street, **Augusta**, 04330. 207-289-2271

### Coordinating Agency

Gary Nichols, Maine State Library, State House, Station 64, **Augusta**, 04333. 207-289-5600

### Affiliates

**Auburn**—Androscoggin Valley Council of Governments. 207-783-9186

Auburn Public Library. 207-782-3191

**Augusta**—Capitol Coastal Council of Governments. 207-622-7146

Department of Economic and Community Development, State House. 207-289-3195

Division of Data Research and Vital Statistics. 207-626-5445

**Bangor**—Bangor Public Library. 207-947-8336

Eastern Maine Development Corporation. 207-942-6389

**Biddleford**—McArthur Library. 207-284-4181

**Brunswick**—Bowdoin College Library. 207-725-8731

Curtis Memorial Library. 207-725-5242

**Caribou**—Northern Maine Regional Planning Commission. 207-498-8736

**Castine**—Maine Maritime Academy. 207-326-4311

**Dexter**—Abbott Memorial Library. 207-924-7292

**Farmington**—University of Maine. 207-778-3501

**Fort Kent**—Blake Library, University of Maine. 207-834-3162

**Lewiston**—Library, Bates College. 207-786-6263

Lewiston Public Library. 207-784-0135

**Machias**—Merrill Library, University of Maine. 207-255-3313

Washington County Regional Planning Commission. 207-255-8686

**Orono**—Fogler Library, University of Maine at Orono. 207-581-1680

**Portland**—Greater Portland Council of Governments. 207-774-9891

Library, University of Southern Maine. 207-780-4275

Portland Public Library. 207-871-1700

**Presque Isle**—University of Maine at Presque Isle. 207-764-0311

**Saco**—Dyer Library. 207-283-3861

**Sanford**—Southern Maine Regional Planning Commission. 207-324-2952

**Waterville**—Miller Library, Colby College. 207-872-3000

**Winslow**—North Kennebec Regional Planning Commission. 207-873-0711

## MARYLAND

### Lead Agency

Robert Dadd/ Jayne Traynham, Maryland State Data Center, Maryland Department of State Planning, 301 West Preston Street, **Baltimore**, 21201. 301-225-4450. (SDC/ BIDD)

### Coordinating Agencies

Elliott A. Rittenhouse, Small Business Development Centers, Maryland Department of Economic and Employment Development, 217 E. Redwood St., 10th Floor, **Baltimore**, 21202. 301-333-6995. (BIDD)

Wesley Wilson, Enach Pratt Free Library, St. Library Resource Center, Maryland Room, 400 Cathedral Street, **Baltimore**, 21201. 301-396-5468

John McNary, Computer Science Center, University of Maryland, **College Park**, 20742. 301-405-3037

### Affiliates

**Annapolis**—Annapolis and Anne Arundel County Library. 301-222-7000

Maryland State Law Library. 301-974-3395

**Baltimore**—Baltimore Regional Council of Governments. 301-333-3333. (SDC/ BIDD)

Department of Economic and Employment Development. 301-333-6980. (BIDD)

Small Business Development Center—Central Maryland Region. 301-889-5772. (BIDD)

**Centreville**—Department of State Planning. 301-758-2995

**Charlotte Hall**—Southern Maryland Region Library Association. 301-934-9442

Southern Maryland Regional Office of Planning. 301-870-2520

Tri-County Council for Southern Maryland. 301-870-2520

**Chestertown**—Kent County Public Library. 301-778-3636

**Columbia**—Howard County Library. 301-313-7800. (SDC/ BIDD)

**Cumberland**—Tri County Council for Western Maryland, Inc. 301-777-2158.

(SDC/ BIDD)

Western Maryland Regional Office of Planning. 301-777-2158

**Delaware**—Wilmington Metro Planning/Coordinating Council. 302-737-6205.

**Denton**—Caroline County Public Library. 301-479-1343

**Elkton**—Cecil County Library. 301-996-5600

Small Business Development Center—Eastern Region, Cecil Community College. 301-392-3366. (BIDD)

**Frederick**—Frederick County Planning Commission. 301-694-1141

Frederick County Public Libraries. 301-694-1628

**Frostburg**—Library, Frostburg State College. 301-689-4424. (SDC/ BIDD)

**Hagerstown**—Small Business Development Center—Western Maryland Region. 301-724-6716. (BIDD)

Washington County Free Library. 301-739-3250

**Hyattsville**—Prince Georges County Memorial Library. 301-699-3500

**Rockville**—Montgomery County Department of Public Libraries. 301-217-3878.

(SDC/ BIDD)

**Salisbury**—Department of State Planning. 301-749-4681

Wicomico County Free Library. 301-749-5171

School of Business, Salisbury University. 301-543-6394. (BIDD)

**Silver Spring**—Maryland National Capitol Park and Planning Commission of Montgomery County. 301-495-4642

**Towson**—Baltimore County Public Library. 301-887-6141

**Upper Marlboro**—Maryland National Capitol Park and Planning Commission of Prince Georges County. 301-952-3660.

(SDC-BIDD)

**Waldorf**—Small Business Development Center—Southern Maryland. 301-932-4156. (BIDD)

**Washington, DC**—Maryland Small Business Development Center. 202-806-1550. (SDC)

## MASSACHUSETTS

### Lead Agencies

Dr. Stephen Coelen, Massachusetts Institute for Social and Economic Research, 128 Thompson Hall, University of Massachusetts, **Amherst**, 01003. 413-545-3460. (SDC/ BIDD)

### Coordinating Agencies

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### Affiliates

**Amherst**—Massachusetts Small Business Development Center. 413-454-6302. (BIDD)

University Library, University of Massachusetts. 413-545-2765. (BIDD)

**Barnstable**—Cape Cod Planning and Economic Development. 508-362-3828. (SDC/ BIDD)

**Beverly**—North Shore Community College Library. 617-922-6722. (BIDD)

**Boston**—Board of Library Commissioners, Commonwealth of Massachusetts. 617-267-9400

Boston Public Library. 617-536-5400

Citizen Information Service. 617-727-7030

Department of Public Health. 617-727-2735

Division of Employment Security. 617-727-7428. (BIDD)

Documents Library, University of Massachusetts. 617-287-5935

Economic Development and Industrial Corporation of Boston. 617-725-3342. (BIDD)

Massachusetts Computer and Software Council. 617-437-0600. (BIDD)

Massachusetts Office of International Trade. 617-367-1830. (BIDD)

Mauricio Gaston Institute for Latino Community Development/ Public Policy, University of Massachusetts—Boston. 617-265-7173. (SDC/ BIDD)

Metropolitan Area Planning Council. 617-451-2770. (SDC/ BIDD)

Miser/ Boston. 617-727-4537. (SDC/ BIDD)

Northeastern University Library. 617-437-2356

State Library. 617-727-2590

State Transportation Library. 617-973-8000

Trade Development Unit, MASSPORT. 617-439-5560. (BIDD)

World Trade Institute. 617-439-5276. (BIDD)

**Bridgewater**—Maxwell Library, Bridgewater State College. 508-697-1394

**Brockton**—Old Colony Planning Council. 508-583-1833. (SDC/ BIDD)

**Cambridge**—Rotch Library, MIT. 617-258-5599  
Widener Library, Harvard University. 617-495-2479

**Charlestown**—Boston Redevelopment Authority. 617-722-4300

**Chestnut Hill**—O'Neil Library, Boston College. 617-552-3354

**Fitchburg**—Montachusett Regional Planning Commission. 508-345-7376. (SDC/ BIDD)

**Greenfield**—Franklin County Planning Commission. 413-774-3167. (SDC/ BIDD)  
Library, Greenfield Community College. 413-774-3131

**Haverhill**—Merrimack Valley Planning Commission. 508-374-0519. (SDC/ BIDD)

**Lowell**—O'Leary Library, University of Lowell. 508-934-4000  
Northern Middlesex Area Commission. 508-454-8021. (SDC/ BIDD)  
O'Leary Library, University of Lowell. 508-934-4000

**Medford**—Tufts University Library. 617-381-3087

**Nantucket**—Nantucket Planning and Economic Development Commission. 508-228-7233. (SDC/ BIDD)

**North Adams**—Library, North Adams State College. 413-664-4511

**North Dartmouth**—Government Documents Library, Southeastern Massachusetts University. 508-999-8740

**Oak Bluffs**—Martha's Vineyard Commission. 508-693-3453. (SDC/ BIDD)

**Pittsfield**—Berkshire County Regional Planning Commission. 413-422-1521. (SDC/ BIDD)  
Jonathan Edwards Library, Berkshire Community College. 413-499-4660

**Salem**—Library, Salem State College. 508-741-6000

**Springfield**—Economic Development Partners. 413-787-1555. (BIDD)  
Springfield City Library. 413-739-3872

**Taunton**—Southeastern Regional Planning and Economic Development. 508-824-1367. (SDC/ BIDD)

**Waltham**—Government Documents Library, Brandeis University. 617-736-4621

**Wellesley**—Horn Library, Babson College. 617-239-4259  
Margaret Clapp Library, Wellesley College. 617-235-0320

**West Barnstable**—Library/ Learning Resource Center, Cape Cod Community College. 508-362-2131

**West Springfield**—Pioneer Valley Planning Commission. 413-781-6045

**Worcester**—Central Massachusetts Regional Planning Commission. 508-756-7717. (SDC/ BIDD)  
Office of Planning and Community Development. 508-799-1440. (BIDD)  
Worcester Public Library. 508-799-1655

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F. Anne Diamond, Statewide Library Programs Division, The Library of Michigan, P.O. Box 30007, **Lansing**, 48909. 517-373-1307

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**Alpena**—Northeast Michigan Community Service Agency. 517-356-3474

**Ann Arbor**—Washtenaw County Metropolitan Planning Commission. 313-994-2435

**Benton Harbor**—Southwestern Michigan Commission. 616-925-1137

**Detroit**—Department of Civil Rights. 313-256-2571  
Detroit City Planning Department. 313-224-6380

Southeast Michigan Council of Governments. 313-961-4266

United Community Services of Metropolitan Detroit. 313-266-9410

**East Lansing**—Applications Programing, Michigan State University. 517-355-4684

**Escanaba**—CUPPAD Regional Commission. 906-786-9234

**Flint**—GLS Region V Planning and Development Commission. 313-234-0340

**Gaylord**—Northeast Michigan Council of Governments. 517-732-3551

**Grand Rapids**—West Michigan Regional Planning Commission. 616-454-9375

**Houghton**—Western Upper Planning and Development Region. 906-482-7205

**Howell**—Livingston County Planning Department. 517-546-7555

**Jackson**—Region 2 Planning Commission. 517-788-4426

**Lansing**—Tri County Regional Planning Commission. 517-393-0342

**Monroe**—Monroe County Planning Commission. 313-243-7093

**Mount Clemens**—Macomb County Planning Commission. 313-469-5285

**Muskegon**—West Michigan Shoreline Regional Planning Commission. 616-722-7878

**Pontiac**—Oakland County Planning Division. 313-858-0720

**Port Huron**—St. Clair County Metropolitan Planning Commission. 313-987-4884

**Portage**—South Central Michigan Planning Council. 616-323-0045

**Saginaw**—East Central Michigan Planning and Development Region. 517-752-0100

**Sault Ste. Marie**—Eastern Upper Peninsula Regional Planning and Development Commission. 906-635-1581

**Southfield**—Southfield Public Library. 313-354-9100

**Traverse City**—Northwest Michigan Council of Governments. 616-947-4780.

**University Center**—Office of Research and Development, Delta College. 517-686-9216

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### Lead Agencies

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### Coordinating Agencies

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### Affiliates

**Appleton**—Upper Minnesota Valley Regional Commission. 612-289-1981

**Bemidji**—A.C. Clark Library, Bemidji State University. 218-755-3340. (BIDD)  
Headwaters Regional Development Commission. 218-751-3108

**Blaine**—Anoka County Library. 612-784-1100. (BIDD)

**Brainerd**—Brainerd Technical College, Small Business Development Center. 218-828-5302. (BIDD)

**Cambridge**—East Central Regional Library. 612-689-1901

**Chanhassen**—Chanhassen Public Library. 612-934-8689

**Crookston**—Media Resources, University of Minnesota Technical College. 218-281-6510 ext. 399

**Duluth**—Arrowhead Regional Development Commission. 218-722-5545  
Center for Economic Development, University of Minnesota—Duluth. 218-726-7288. (BIDD)

**Fergus Falls**—Fergus Falls Public Library. 218-739-9387

**Grand Rapids**—Grand Rapids Small Business Development Center. 218-327-2241. (BIDD)

**Hibbing**—Hibbing Public Library. 218-262-1038. (BIDD)

**Mankato**—Memorial Library, Mankato State University. 507-389-5961. (BIDD)  
Region 9 Regional Development Commission. 507-387-5643

**Marshall**—Library, Southwest State University. 507-537-6108. (BIDC)  
Marshall-Lyon County Library. 507-532-2646

**Minneapolis**—Machine Readable Data Center. 612-624-4398. (BIDC)  
Minneapolis Public Library. 612-372-6534. (BIDC)  
Wilson Library, University of Minnesota. 612-624-5073. (BIDC)

**Moorhead**—Lake Agassiz Regional Library. 218-233-7594  
Moorhead State University Library. 218-236-2352. (BIDC)

**Mora**—East Central Regional Development Commission. 612-679-4065

**Morris**—Briggs Library, University of Minnesota—Morris. 612-589-2211. (BIDC)

**Owatonna**—Owatonna Public Library. 507-451-4660

**Pine River**—Kitchigami Regional Library. 281-587-2171. (BIDC)

**Red Wing**—Red Wing Public Library. 612-388-2884

**Rochester**—Rochester Public Library. 507-285-8002. (BIDC)

**Roseville**—Ramsey County Public Library. 612-631-0494

**Slayton**—Southwest Regional Development Commission. 507-836-8549

**St. Cloud**—Economic Development Center, St. Cloud State University. 612-255-4250. (BIDC)  
Great River Regional Library. 612-251-7282. (BIDC)  
St. Cloud Area Planning Organization. 612-252-7568  
St. Cloud Technical College. 612-252-0101. (BIDC)

**St. Paul**—Council on Asian Pacific Minnesotans. 612-296-0538  
Council on Black Minnesotans. 612-643-3015  
Department of Jobs and Training. 612-297-3419. (BIDC)  
Indian Affairs Council. 612-296-3611  
James J. Hill Reference Library. 612-227-9531. (BIDC)  
Library, Trade and Economic Development Department. 612-296-8902. (BIDC)  
Metropolitan Council. 612-291-6616. (BIDC)  
Metropolitan Council Data Center. 612-291-8140  
Planning Information Center—DATANET. 612-296-2559. (BIDC)  
St. Paul Public Library. 612-292-6178. (BIDC)  
Spanish Speaking Affairs Council. 612-296-9587

**Staples**—Region 5 Regional Development Commission. 218-894-3233

**Thief River Falls**—Northwest Regional Development Commission. 218-681-2637  
Northwest Regional Library. 218-681-4325

**Waseca**—University of Minnesota-Waseca, Learning Resource Center. 507-835-1000 ext. 302

**Willmar**—Mid-Minnesota Regional Development Commission. 612-235-8504  
Pioneerland Regional Library System. 612-235-3162. (BIDC)

**Winona**—Small Business Development Center—Winona State University. 507-457-5088. (BIDC)  
Winona Public Library. 507-452-4582

**Worthington**—Nobles County Library. 507-372-2981

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### Lead Agency

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### Coordinating Agency

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### Affiliates

**Booneville**—Northeast Mississippi Planning and Development District. 601-728-6248

**Clarksdale**—North Delta Mississippi Planning and Development District. 601-627-3401

**Greenville**—South Delta Planning and Development District. 601-378-3831

**Gulfport**—Gulf Regional Planning Commission. 601-864-1167  
Gulfport City Planning Commission. 601-868-5710  
Southern Mississippi Planning and Development District. 601-868-2311

**Hattiesburg**—Bureau of Business Research, University of Southern Mississippi. 601-226-7247

**Jackson**—Central Mississippi Planning and Development District. 601-981-1511  
City of Jackson, Division of Metropolitan Planning. 601-960-1845  
Henry Thomas Sampson Library, Jackson State University. 601-968-2123  
Mississippi Library Commission. 601-359-1036  
Department of Economic and Community Development. 601-359-3797  
Library, Jackson State University. 601-982-6314

**Mississippi State**—Golden Triangle Planning and Development District. 601-325-3855  
Mitchell Memorial Library, Mississippi State University. 601-325-3060

**Natchez**—Southwest Mississippi Planning and Development District. 601-446-6045

**Newton**—East Central Mississippi Planning and Development District. 601-683-2007

**Pontotoc**—Three Rivers Planning and Development District. 601-489-2415

**Raymond**—McLendon Library, Hinds Community College District. 601-857-3253

**Winona**—North Central Mississippi Planning and Development District. 601-283-2675

## MISSOURI

### Lead Agency

Kate Graf, Missouri State Library, P.O. Box 387, 600 West Main St., **Jefferson City**, 65102. 314-751-3615

### Coordinating Agencies

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Evelyn J. Cleveland, Office of Social and Economic Data Analysis, University of Missouri-Columbia, 224 Lewis Hall, **Columbia**, 65211. 314-882-7396  
Dr. Christopher Salter, Geographic Resources Center, University of Missouri-Columbia, 4 Stewart Hall, **Columbia**, 65211

### Affiliates

**Camdenton**—Camden County Extension Service. 314-346-4440  
Lake of the Ozarks Council of Local Governments. 314-346-5616

**Carrollton**—Missouri Valley Regional Planning Commission. 816-542-2660

**Clayton**—St. Louis County Planning Department. 314-889-2465

**Clinton**—Kaysinger Basin Regional Planning Commission. 816-885-3393

**Independence**—Mid-Continent Public Library. 816-836-5200

**Jefferson City**—Division of Commercial and Economic Development, Department of Economic Development and Research. 314-751-9073  
Employment Security Division, Research and Analysis Section. 314-751-3637  
Mid-Missouri Council of Governments. 314-634-2303

**Kansas City**—Mid-America Regional Council. 816-474-4240

**Kirkville**—Northeast Missouri Regional Planning Commission. 816-665-4615

**Lebanon**—Kinderhook Regional Library. 417-532-2148

**Malden**—Bootheel Regional Planning and Economic Development Commission. 314-276-2242

**Maryville**—Small Business Development Center. 816-271-4364

**Moberly**—Little Dixie Regional Libraries. 816-263-4426

**Palmyra**—Mark Twain Regional Advisory Commission. 314-769-2081

**Perryville**—Southeast Missouri Regional Planning and Economic Development Commission. 314-547-8357

**Poplar Bluff**—Rutland Library, Three Rivers Community College. 314-686-4101

**Rolla**—Meramec Regional Planning Commission. 314-364-2993

**Springfield**—Center for Resources Planning and Management, Southwest Missouri State University. 417-836-6900

**St. Joseph**—Hearnes Learning Resources Center, Missouri Western State College. 816-271-4573  
MO-KAN Regional Council. 816-233-3144

**St. Louis**—East-West Gateway Coordinating Council. 314-421-4220

**Trenton**—Green Hills Regional Planning Commission. 816-359-5636

**Union**—Scenic Regional Library. 314-583-3224

**Warrensburg**—Show-Me Regional Planning Commission. 816-747-2294

**Warrenton**—Boonslick Regional Planning Council. 314-456-3473

**West Plains**—South Central Ozark Council of Governments. 417-256-8123

## MONTANA

### Lead Agency

Patricia Roberts, Census and Economic Information Center, Montana Department of Commerce, 1424 Ninth Avenue, **Helena**, 59620-0401. 406-444-2896. (SDC/BIDC)

### Coordinating Agencies

Lee Faulkner, Survey Research Center, Wilson Hall, Room 1-108, Montana State University, **Bozeman**, 59717. 406-994-4481

Cathy Shenkle, Research and Analysis Bureau, Montana Department of Labor and Industry, P.O. Box 1728, **Helena**, 59624. 406-444-2430

Jim Sylvester, Bureau of Business and Economic Research, University of Montana, **Missoula**, 59812. 406-243-5113

### Affiliates

**Billings**—Billings Chamber of Commerce. 406-245-4111. (BIDC)  
Eastern Montana College Library. 406-657-1656. (SDC/BIDC)  
Parmly Billings Library. 406-657-8258. (SDC/BIDC)

**Bozeman**—Bozeman Public Library. 406-586-4788  
Montana Extension Service, Montana State University. 406-994-5608  
Renne Library, Montana State University. 406-994-3430. (SDC/BIDC)

**Butte**—Butte Local Development Corporation. 406-723-4349. (BIDC)

Library, Montana College of Mineral Science and Technology. 406-496-4286. (SDC/BIDC)

**Dillon**—Carson Memorial Library, Western Montana College. 406-683-7492. (SDC/BIDC)

**Glasgow**—Glasgow City County Library. 406-228-2731

**Glendive**—Carey Library, Dawson Community College. 406-365-3396. (BIDC)

**Great Falls**—Great Falls Area Chamber of Commerce. 406-761-4434. (BIDC)  
Great Falls Public Library. 406-453-0349. (SDC/BIDC)

**Havre**—Bear Paw Development Corporation. 406-265-9226. (BIDC)  
Northern Montana College Library. 406-265-3706. (SDC/BIDC)

**Helena**—Lewis and Clark Library. 406-442-2380. (SDC/BIDC)

**Kalispell**—Flathead County Library. 406-756-5685. (SDC/BIDC)  
Flathead Valley Community College, SBDC. 405-756-3888. (BIDC)

**Miles City**—Miles City Public Library. 406-232-1496. (SDC/BIDC)

**Missoula**—Mansfield Library, University of Montana. 406-243-6700. (SDC/BIDC)  
Missoula Economic Development Corporation. 406-728-3337. (BIDC)  
Public Library. 406-721-2665. (SDC/BIDC)

## NEBRASKA

### Lead Agency

Jerome Deichert/Tim Humberger, Center for Public Affairs Research, University of Nebraska-At Omaha, Peter Kiewit Conference Center, 1313 Farnam-on-the-Mall, **Omaha**, 68182. 402-595-2311

### Coordinating Agencies

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Federal Documents Librarian, Nebraska Library Commission, 1420 P Street, **Lincoln**, 68508. 402-471-2045

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Small Business Development Center. 308-432-6282.

**Fairbury**—Blue Valley Community Action. 402-729-2278

**Humboldt**—SENCA. 402-862-2411

**Kearney**—Mid-Nebraska Community Services. 308-234-2591  
Small Business Development Center. 308-234-8344.

**Lincoln**—Lincoln-Lancaster County Planning Department. 402-471-7491  
Nebraska Department of Economic Development. 402-471-3779  
SENDD. 402-475-2560  
Small Business Development Center. 402-472-3358.  
Bureau of Business Research, University of Nebraska-Lincoln. 402-472-2334.

**Loup City**—Central Nebraska Community Services. 308-745-0780

**North Platte**—Small Business Development Center. 308-534-5115.

**Ogallala**—West Central Nebraska Development District. 308-284-6077

**Omaha**—Small Business Development Center. 402-595-2381  
MAPA. 402-444-6866

**Peru**—Small Business Development Center. 402-872-2274

**Scottsbluff**—Panhandle Area Development District. 308-632-1307  
Small Business Development Center. 308-635-7513

**Sioux City, Iowa**—SIMPACO. 712-279-6286

**Taylor**—Region 26 Council. 308-942-3461

**Wisner**—Goldenrod Hills Community Action Council. 402-529-3513

**Wayne**—Small Business Development Center. 402-375-7575

## NEVADA

### Lead Agency

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**Carson City**—Carson City Planning Division, Community Development Department. 702-887-2180  
Employment Security Research. 702-687-4550  
Nevada Budget Division. 702-687-4065  
Nevada State Welfare Division Research and Statistics. 702-687-4832  
Planning, Research, and Evaluation, Nevada Department of Education. 702-687-3130  
Western Nevada Development District. 702-883-7333

**Elko**—Elko County Library. 702-738-3066

**Henderson**—Planning Department. 702-565-2088

**Las Vegas**—Center for Business and Economic Research, University of Nevada. 702-739-3191

City of Las Vegas, Department of Community Planning and Development. 702-386-6301

Clark County Department of Comprehensive Planning. 702-455-4181

Dickinson Library, University of Nevada-Las Vegas. 702-739-3409

Las Vegas-Clark County Library District. 702-733-7810

Nevada Development Authority. 702-791-0000

Nevada Legal Services. 702-386-1070

**North Las Vegas**—City of North Las Vegas, Community Planning and Development. 702-649-0207

**Reno**—Bureau of Business and Economic Research, University of Nevada. 702-784-6877

City of Reno, Planning and Community Development Department. 702-334-2218

Getchell Library, University of Nevada-Reno, Government Publications. 702-784-6579

Washoe County Department of Comprehensive Planning. 702-328-3615

Washoe County Library. 702-785-4012

**Sparks**—City of Sparks Planning Department. 702-353-2332

## NEW HAMPSHIRE

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### Affiliates

**Berlin**—Berlin City Public Library. 603-752-5210

**Boscawen**—Central New Hampshire Regional Planning Commission. 603-796-2129

**Claremont**—Fiske Free Library. 603-542-4393

**Concord**—Concord Public Library. 603-225-8670

Franklin Pierce Law Center Library. 603-228-1541

**Dover**—Strafford Regional Planning Commission. 603-742-2523

**Durham**—Ezekiel W. Dimond Library, University of New Hampshire. 603-862-1777

**Exeter**—Rockingham Planning Commission. 603-778-0885

**Franklin**—Franklin Public Library. 603-934-2911

**Hanover**—Baker Library, Dartmouth College. 603-646-1110

**Henniker**—Danforth Library, New England College. 603-428-2211

**Keene**—Mason Library, Keene State College. 603-358-2711  
Southwest Regional Planning Commission. 603-357-0557

**Laconia**—Laconia Public Library. 603-524-4775

**Lebanon**—Upper Valley-Lake Sunapee Council. 603-448-1680

**Littleton**—North Country Council. 603-444-6303

**Manchester**—Geisel Library, St. Anselm College. 603-641-7301

H.A.B. Shapiro Memorial Library, New Hampshire College. 603-668-2164

Manchester City Library. 603-624-6550  
Southern New Hampshire Planning Commission. 603-669-4664

**Meredith**—Lakes Region Planning Commission. 603-279-8171

**Milford**—Wadleigh Memorial Library. 603-673-2408

**Nashua**—Nashua Public Library. 603-594-3412

Nashua Regional Planning Commission. 603-883-0366

**Peterborough**—Peterborough Town Library. 603-924-6401

**Plymouth**—Herbert Lamson Library, Plymouth State College. 603-535-2258

**Portsmouth**—Portsmouth Public Library. 603-427-1540

**Salem**—Kelley Library. 603-898-7064

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**Atlantic City**—Atlantic County Division of Economic Development. 609-345-6700. (BIDD)

Atlantic County Division of Planning. 609-343-2231. (SDC)

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Warren County Planning Board. 908-475-6532. (SDC/ BIDD)

**Bridgeton**—Cumberland County Planning and Development. 609-453-2175. (SDC/ BIDD)

**Camden**—Delaware River Port Authority of Pennsylvania and New Jersey. 609-963-6420. (BIDD)

Rutgers University Forum for Policy Research and Public Service. 609-757-6083. (BIDD)

Rutgers-Camden Library. 609-757-6034. (SDC/ BIDD)

**Cape May Court House**—Cape May County Planning Board. 609-465-1081. (SDC/ BIDD)

**Carlstadt**—Meadowlands Chamber of Commerce. 201-939-0707. (BIDD)

**Cedar Grove**—Essex County Planning Board. 201-509-8200. (SDC/ BIDD)

**Clayton**—Gloucester County Department of Planning. 609-863-6661

**Clifton**—IMA Management Association, Inc. 201-473-8770. (BIDD)

**Edison**—The Institute for Management and Technical Development. 201-497-0960. (BIDD)

**Elizabeth**—Union County Planning Board. 201-527-4229

**Flemington**—Hunterdon County Planning Board. 908-788-1490. (SDC/ BIDD)

**Freehold**—Monmouth County Department of Economic Development. 201-431-7470. (BIDD)

Monmouth County Planning Board. 201-431-7460. (SDC/ BIDD)

**Hackensack**—Bergen County Department of Economic and Economic Development. 201-646-3325. (SDC/ BIDD)

**Jersey City**—Hudson County Planning and Economic Development. 201-795-6188. (SDC/ BIDD)

**Morristown**—Economic Development, Jersey Central Power and Light Company. 201-455-8339. (BIDD)

Morris County Planning Board. 201-285-1667. (SDC)

**Mt. Holly**—Burlington County Land Use Office. 609-265-5787. (SDC)

**New Brunswick**—Middlesex County Planning Board. 908-745-4185. (SDC/ BIDD)

**Newark**—New Jersey Division of International Trade. 201-648-7095. (BIDD)

New Jersey Bell Telephone Company. 201-649-9900. (BIDD)

New Jersey Small Business Development Center. 201-648-5621. (BIDD)

Public Service Electric and Gas Company. 201-430-6458. (BIDD)

**Newton**—Rutgers Cooperative Extension. 201-383-3800. (BIDD)

Sussex County Economic Development. 201-579-0540. (BIDD)

Sussex County Planning Department. 201-579-0500

**Paterson**—Passaic County Department of Economic Development. 201-881-4427. (BIDC)  
Passaic County Planning Board. 201-881-4490

**Pennsauken**—Camden County Department of Policy Planning and Development. 609-756-7860.

**Philadelphia, Pennsylvania**—Delaware Valley Regional Planning Commission. 215-592-1800. (SDC/BIDC)

**Plainfield**—Plainfield Public Library. 908/757-1111. (BIDC)

**Pleasantville**—Atlantic Electric Company. 609-645-4290. (BIDC)

**Pomona**—South Jersey Center for Public Affairs, Stockton State College. 609-652-4657. (BIDC)  
Stockton State College Library. 609-652-4268. (BIDC)

**Princeton**—MSM Regional Council, Inc. 609-452-1717. (BIDC)

**Rio Grande**—Cape May County Department of Economic Development. 609-886-1755. (BIDC)

**Salem**—Salem County Planning Board. 609-935-7510. (SDC/BIDC)

**Somerville**—Somerset County Planning Board. 908-231-7021. (SDC/BIDC)

**Toms River**—Ocean County Planning Board. 908-929-2054. (SDC/BIDC)

**Trenton**—Division of Development for Small Businesses and Women and Minority Businesses. 609-292-3860. (BIDC)  
Mercer County Planning Board. 609-989-6545. (SDC/BIDC)  
New Jersey Business and Industry Association. 609-393-7707. (BIDC)  
New Jersey Department of Banking. 609-984-2772. (SDC/BIDC)  
New Jersey Department of Community Affairs. 609-633-3879  
New Jersey State Library. 609-292-6294. (BIDC)  
Office of Economic Research, New Jersey Department of Commerce, Energy and Economic Development. 609-984-3550. (BIDC)  
Retail Merchants Association. 609-393-8006. (BIDC)

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**Albuquerque**—Albuquerque T-VI Business Assistance Center. 505-768-0665. (BIDC)  
City of Albuquerque Planning Department. 505-768-3860  
Middle Rio Grande Council of Governments. 505-247-1750  
University of New Mexico General Library. 505-277-5441  
University of New Mexico, Librarian, Native American Studies. 505-277-8917

**Carlsbad**—Carlsbad Library and Museum. 505-885-6776

**Espanola**—Small Business Development Center, Northern New Mexico Community College. 505-753-7141. (BIDC)

**Farmington**—City of Farmington, Community Development Department. 505-327-7701

**Gallup**—Gallup Public Library. 505-863-3692  
University of New Mexico—Gallup. 505-722-7221. (BIDC)

**Grants**—Business Assistance Center, New Mexico State University—Grants. 505-287-8221. (BIDC)  
Library, New Mexico State University—Grants. 505-287-7891 ext 116

**Hobbs**—Business Assistance Center, New Mexico Junior College. 505-392-4510. (BIDC)  
Pannell Library, New Mexico Junior College. 505-392-4510

**Las Cruces**—City Planning Office. 505-526-0606

**Las Vegas**—Department of Business, New Mexico Highlands University. 505-425-7511. (BIDC)  
Donnelly Library, New Mexico Highlands University. 505-454-3332  
Luna Vo-Tech Institute. 505-454-2595. (BIDC)

**Los Alamos**—Los Alamos County Economic Development, University of New Mexico—Los Alamos. 505-662-0001. (BIDC)

**Los Lunas**—Business Assistance Center, University of New Mexico—Valencia. 505-865-9596. (BIDC)

**Portales**—Library, Eastern New Mexico University. 505-562-2624

**Roswell**—Business Assistance Center, Eastern New Mexico University. 505-624-7133. (BIDC)

**Santa Fe**—North Central New Mexico Economic Development District. 505-827-8934  
Santa Fe Community College. 505-438-1343. (BIDC)

**Silver City**—Business Assistance Center, Western New Mexico University. 505-538-6320. (BIDC)

**Taos**—Taos County Economic Development. 505-758-8731. (BIDC)

**Tucumcari**—Tucumcari Area Vo-Tech. 505-461-4413. (BIDC)

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New York State Department of Economic Development. 518-474-5664  
New York State Department of Labor. 518-457-3099  
New York State Office of Rural Affairs. 518-473-9003

**Amherst**—Erie and Niagara Counties Regional Planning Board. 716-837-2035  
Lockwood Memorial Library, Management and Economics Subject Specialist, Suny—Buffalo. 716-636-2821

**Binghamton**—Southern Tier East Regional Planning Board. 607-724-1327

**Buffalo**—Buffalo and Erie County Public Library. 716-858-7099  
Erie County Department of Environment and Planning. 716-858-6013

**Cairo**—Greene County Planning Department. 518-622-3251

**Canton**—St. Lawrence County Planning Board. 315-379-2292

**Carmel**—Putnam County Division of Planning and Development. 914-878-2380

**Corning**—Southern Tier Central Regional Planning and Development Board. 607-962-5092

**Goshen**—Orange County Department of Planning and Development. 914-294-5151

**Hauppauge**—Long Island Regional Planning Board. 516-360-5194

**Hudson**—Columbia County Department of Planning and Economic Development. 518-828-3375

**Ithaca**—CISER Data Archive, Cornell University. 607-255-8399  
Olin Library, Cornell University. 607-255-9481

**Lake George**—Lake Champlain/Lake George Regional Planning Board. 518-668-5773

**Lockport**—Niagara County Planning and Industrial Development Department. 716-439-6033

**New City**—Rockland County Planning Board. 914-638-5480

**New York City**—Center for the Social Sciences, Columbia University. 212-854-7858  
Graduate Center, City University of New York. 212-642-2085  
New York City Planning Commission. 212-720-3446  
New York Metropolitan Transportation Council. 212-938-3352

**Pearl River**—Rockland Economic Development Corporation. 914-735-7040

**Plattsburgh**—Economic Development and Technical Assistance Center, State University of New York-Plattsburgh. 518-564-2214

**Poughkeepsie**—Division of Management Studies, Marist College. 915-575-3225  
Dutchess County Planning Department. 914-485-9681

**Rochester**—Center for Governmental Research. 716-325-6360  
Genesee Finger Lakes Regional Planning Council. 716-546-5902

**Salamanca**—Southern Tier West Regional Planning and Development Board. 716-945-5301

**Sanborn**—Niagara Frontier Economic Development Technical Assistance Center, Niagara Community College. 716-731-3271

**Schenectady**—Capital District Regional Planning Commission. 518-393-1715

**Syracuse**—Central New York Regional Planning and Development Board. 315-422-8276  
Greater Syracuse Chamber of Commerce. 315-470-1886  
Media Services Department, Bird Library, Syracuse University.  
Syracuse-Onondaga County Planning Agency. 315-435-2611

**Utica**—Herkimer-Oneida Counties Comprehensive Planning Program. 315-798-5710

**White Plains**—Westchester County Department of Planning. 914-285-4412

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**Asheville**—Land-of-Sky Regional Council. 704-254-8131. (SDC/ BIDD)  
Pack Memorial Public Library. 704-255-5203. (SDC/ BIDD)  
Region D Council of Governments. 704-264-5558. (SDC/ BIDD)

**Bryson City**—Southwestern North Carolina Planning and Economic Development Commission. 704-488-9211. (SDC/ BIDD)

**Charlotte**—Centralina Council of Governments. 704-372-2416. (SDC/ BIDD)  
Charlotte Chamber of Commerce. 704-377-6911. (SDC/ BIDD)  
Charlotte/Mecklenburg County Public Library. 704-336-2980. (SDC/ BIDD)  
University of North Carolina at Charlotte. 704-547-2307. (SDC/ BIDD)

**Cullowhee**—Center for Improving Mountain Living, Western Carolina University. 704-227-7492. (SDC/ BIDD)

**Durham**—Durham County Public Library. 919-560-0100. (SDC/ BIDD)

**Fayetteville**—Cumberland County Public Library. 919-483-3745. (SDC/ BIDD)  
Region M Council of Governments. 919-323-4191. (SDC/ BIDD)

**Greensboro**—Greensboro Area Chamber of Commerce. 919-275-8675. (SDC/ BIDD)  
Greensboro Public Library. 919-373-2471. (SDC/ BIDD)  
Piedmont Triad Council of Governments. 919-294-4950. (SDC/ BIDD)  
University of North Carolina at Greensboro, School of Business and Economics. 919-334-3055. (SDC/ BIDD)

**Greenville**—Regional Development Institute, East Carolina University. 919-757-6650. (SDC/ BIDD)  
Sheppard Memorial Library. 919-830-4580. (SDC/ BIDD)

**Henderson**—Kerr-Tar Regional Council of Governments. 919-492-8561. (SDC/ BIDD)

**Hertford**—Albermarle Regional Planning and Development Commission. 919-426-5753. (SDC/ BIDD)

**Hickory**—Western Piedmont Council of Governments. 704-322-9191. (SDC/ BIDD)

**Jacksonville**—Onslow County Public Library. 919-455-7350. (SDC/ BIDD)

**Lumberton**—Lumber River Council of Governments. 919-738-8104. (SDC/ BIDD)

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**Raleigh**—Agriculture Extension Service, North Carolina State University. 919-737-2659. (SDC/ BIDD)  
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North Carolina Association of County Commissioners. 919-832-2893. (SDC/ BIDD)  
North Carolina League of Municipalities. 919-834-1311. (SDC/ BIDD)  
Wake County Business Library. 919-755-6690. (SDC/ BIDD)

**Research Triangle Park**—Triangle J Council of Governments. 919-549-0551. (SDC/ BIDD)

**Rockingham**—Pee Dee Council of Governments. 919-895-6306. (SDC/ BIDD)

**Rocky Mount**—Region L Council of Governments. 919-446-0411. (SDC/ BIDD)

**Rutherfordton**—Isothermal Planning and Development Commission. 704-287-2281. (SDC/ BIDD)

**Washington**—Mid-East Economic Development Commission. 919-946-8043. (SDC/ BIDD)

**Wilmington**—Cape Fear Council of Governments. 919-763-0191. (SDC/ BIDD)  
New Hanover County Public Library. 919-341-4390. (SDC/ BIDD)  
Center for Business and Economic Services, University of North Carolina at Wilmington. 919-395-3000. (SDC/ BIDD)

**Winston-Salem**—Forsyth County Public Library. 919-727-2208. (SDC/ BIDD)  
Northwest Piedmont Council of Governments. 919-722-9346. (SDC/ BIDD)

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 Veterans Memorial Public Library. 701-222-6410  
 Lewis and Clark Regional Council. 701-663-6588  
**Devils Lake**—Carnegie Library. 701-662-2220  
 North Central Planning Council. 701-662-8131  
**Dickinson**—Dickinson Public Library. 701-225-8100  
**Fargo**—Fargo Public Library. 701-241-1490  
**Grand Forks**—Grand Forks Public Library. 701-772-8116  
**Jamestown**—South Central Regional Council. 701-252-8060  
**Minot**—Memorial Library, Minot State College. 701-857-3200  
 Minot Public Library. 701-852-1045  
 Souris Basin Regional Council. 701-839-6641  
**Newtown**—Management Assistance Office, Three Affiliated Tribes. 701-627-3623  
**Valley City**—Allen Memorial Library, Valley City State College. 701-845-7278  
**Williston**—Williston Community Library. 701-774-8805

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**Lead Agency**

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**Affiliates**

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County of Summit Department of Planning and Economic Development. 216-379-2552  
 Northeast Ohio Four County Regional Planning and Development Organization. 216-836-5731  
**Ashland**—Ashland Regional Planning Commission. 419-289-0000  
**Batavia**—Clermont County Public Library. 513-732-2128  
**Bowling Green**—Population and Society Research Center, Bowling Green University. 419-372-2497  
**Cambridge**—Ohio Mid-Eastern Governments Association. 614-439-4471  
**Canton**—Stark County District Library. 216-452-0665  
 Stark County Regional Planning Commission and Area Transportation Study. 216-438-0401  
**Cincinnati**—Hamilton County Regional Planning Commission. 513-632-8461  
 Ohio-Kentucky-Indiana Regional Council of Governments. 513-621-7060  
**Cleveland**—Cuyahoga County Planning Commission. 216-443-3700  
 Northeast Ohio Areawide Coordinating Agency. 216-241-2414  
**Columbus**—Health Policy Data Center, Ohio Department of Health. 614-644-8530  
**Dayton**—Miami Valley Regional Planning Commission. 513-223-6323  
 Montgomery County Planning Commission. 513-225-4349  
**Defiance**—Maumee Valley Planning Organization. 419-784-3882  
**Elyria**—Lorain County Planning Commission. 216-329-5544  
**Gallipolis**—Bossard Memorial Library of Gallia County. 614-446-7323  
**Jefferson**—Ashtabula County Planning Commission. 216-576-9090  
**Lebanon**—City of Lebanon. 513-932-3060  
**Lima**—Lima-Allen County Regional Planning Commission. 419-228-1836  
**Mansfield**—Mansfield-Richland County Public Library. 419-524-1041  
 Richland County Regional Planning Commission. 419-755-5684  
**Marietta**—Buckeye Hills-Hocking Valley Regional Development District. 614-374-9436  
**Medina**—Medina County Planning Commission. 216-722-9219  
**Middletown**—Department of Planning and Economic Development. 513-425-7962  
**Newark**—Newark Public Library. 614-345-8972  
**Oxford**—King Library, Miami University. 513-529-3342  
**Painesville**—Lake County Planning Commission. 216-357-2739  
**Portsmouth**—Ohio Valley Regional Development Commission. 614-354-7795  
**Springfield**—Clark County Public Library. 513-328-6903  
**Steubenville**—Jefferson County Regional Planning Commission. 614-283-4111  
**Toledo**—Economic Information System, University of Toledo. 419-537-2430

Toledo Metropolitan Area Council of Governments. 419-241-9155  
**Warren**—Trumbull County Planning Commission. 216-841-0480  
**Wooster**—Wayne County Planning Department. 216-263-3109  
**Youngstown**—Eastgate Development and Transportation Agency. 216-746-7601  
 Mahoning County Planning Commission. 216-788-1843

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**Affiliates**

**Ardmore**—Southern Oklahoma Development Association. 405-226-2250  
**Bartlesville**—Bartlesville Public Library. 918-333-8867  
**Beaver**—Oklahoma Economic Development Association. 405-625-4531  
**Burns Flat**—South Western Oklahoma Development Authority. 405-562-4886  
**Chickasha**—Nash Library, University of Science and Arts of Oklahoma. 405-224-3140  
**Clinton**—Western Plains Library System. 405-323-0974  
**Duncan**—Association of South Central Oklahoma Governments. 405-252-0596  
**Enid**—North Oklahoma Development Association. 405-237-4810  
**Fort Smith, Arkansas**—Arkoma Regional Planning Commission. 501-785-2651  
**Idabel**—Idabel Public Library. 405-286-6406  
**Lawton**—Library, Cameron University. 405-581-2200  
**McAlester**—Southeastern Public Library System. 918-426-0456  
**Miami**—Miami Public Library. 918-542-3064  
**Muskogee**—Eastern Oklahoma Development District. 918-682-7891  
**Norman**—Center for Economic and Management Research, University of Oklahoma. 405-325-2931  
**Oklahoma City**—Association of Central Oklahoma Government. 405-848-8961  
 Health Sciences Center Library, University of Oklahoma. 405-271-2285  
 Management Information System, City of Oklahoma City. 405-231-2616  
**Ponca City**—Ponca City Library. 405-767-0345  
**Shawnee**—Central Oklahoma Economic Development District. 405-273-6410  
**Stillwater**—Edmond Law Library. 405-744-9770

**Tulsa**—Indian Nations Council of Governments. 918-584-7526

**Vinita**—Grand Gateway Economic Development Association. 918-256-6478

**Wilburton**—Kiamichi Economic Development District. 918-465-2367

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**Ashland**—Southern Oregon State College. 503-482-6365

**Astoria**—Clatsop Community College. 503-325-0910

**Bend**—Deschutes County Library. 503-388-6677

**Coos Bay**—Southwest Oregon Community College. 503-888-2525

**Corvallis**—Human Development and Family Services. 503-737-4765

Oregon District Four Council of Governments. 503-757-6851

**Eugene**—Lane Council of Governments. 503-687-4437

**LaGrande**—Regional Services Institute, Eastern Oregon State College. 503-962-3755

**Ontario**—Treasure Valley Community College. 503-889-6493

**Pendleton**—Blue Mountain Community College. 503-276-1260

East Central Oregon Association of Counties. 503-276-6732

**Portland**—Metropolitan Service District. 503-221-1646

**Roseburg**—Umpqua Regional Council of Governments. 503-440-4231

**Salem**—Mid-Willamette Valley Council of Governments. 503-588-6177

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**Allentown**—Joint Planning Commission, Lehigh-Northampton Counties. 215-264-4544. (SDC/ BIDD)

**Altoona**—Southern Alleghenies Planning and Development Commission. 814-946-6537. (SDC/ BIDD)

**Ambler**—Ambler Campus Library, Temple University. 215-283-1392. (SDC/ BIDD)

**Bellefonte**—Centre County Office of Planning. 814-355-6791. (SDC/ BIDD)

**Bradford**—Allegheny Research and Development Center, University of Pittsburgh at Bradford. 814-368-7455. (SDC/ BIDD)

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**Cumberland, Maryland**—Tri-County Council for Western Maryland. 301-777-2158

**Edinboro**—Baron-Forness Library, Edinboro University. 814-732-2509. (SDC/ BIDD)

**Erie**—Economic Research Institute of Erie, Penn State at Erie. 814-898-6107. (SDC/ BIDD)

Erie Area Chamber of Commerce. 814-454-7191. (SDC/ BIDD)

Erie County Planning Department. 814-451-6336. (SDC/ BIDD)

**Franklin**—Northwest Pennsylvania Regional Planning and Development Commission. 814-437-3024. (SDC/ BIDD)

**Harrisburg**—Pennsylvania Department of Community Affairs. 717-787-8169. (SDC/ BIDD)

Department of Public Welfare. 717-783-2200. (SDC/ BIDD)

Office of Economic Policy, Planning, and Research, Pennsylvania Department of Commerce. 717-787-4088. (SDC/ BIDD)

Pennsylvania Department of Transportation, Technical Reference Center. 717-787-6527. (SDC/ BIDD)

State Health Data Center, Pennsylvania Department of Health. 717-783-2548. (SDC/ BIDD)

Tri-County Regional Planning Commission. 717-234-2639. (SDC/ BIDD)

Department of Aging. 717-783-3126

Pennsylvania Retailers' Association. 717-233-7976

**Indiana**—Institute to for Research and Community Affairs, Indiana University of Pennsylvania. 412-357-2251. (SDC/ BIDD)

**Johnstown**—Greater Johnstown Chamber of Commerce. 814-536-5107. (SDC/ BIDD)

**Lancaster**—Lancaster County Planning Commission. 717-299-8333. (SDC/ BIDD)

**Lewisburg**—SEDA-Council of Governments. 717-524-4491. (SDC/ BIDD)

**Mansfield**—Rural Services Institute, Mansfield University. 717-662-4808. (SDC/ BIDD)

**Media**—Delaware County Planning Department. 215-891-5200. (SDC/ BIDD)

**Norristown**—Montgomery County Planning Commission. 215-264-4544. (SDC/ BIDD)

**Philadelphia**—Institute of Public Policy Studies, Temple University. 215-787-5156. (SDC/ BIDD)

Pennsylvania Department of Community Affairs, Regional Office. 215-560-2256. (SDC/ BIDD)

Pennsylvania Manufacturers Association. 215-629-5081

Resource Center for Human Services. 215-568-3755. (SDC/ BIDD)

**Pittsburgh**—Center for Social and Urban Research, University of Pittsburgh. 412-624-5442. (SDC/ BIDD)

Department of City Planning. 412-255-2223

Health and Welfare Planning Association. 412-392-3103. (SDC/ BIDD)

Southwestern Pennsylvania Regional Planning Commission. 412-391-5590. (SDC/ BIDD)

**Pittston**—Economic Development Council of Northeastern Pennsylvania. 717-655-5581. (SDC/ BIDD)

**Reading**—Berks County Planning Commission. 215-378-8703. (SDC/ BIDD)

**Ridgway**—North Central Pennsylvania Regional Planning and Development Commission. 814-940-6500. (SDC/ BIDD)

**Scranton**—Alumni Memorial Library, University of Scranton. 717-941-4001. (SDC/ BIDD)

**Slippery Rock**—Geography and Environmental Studies, Slippery Rock University. 412-738-2388. (SDC/ BIDD)

**Towanda**—Northern Tier Regional Planning and Development Commission. 717-265-9103. (SDC/ BIDD)

**Uniontown**—Penn State-Fayette Campus. 412-430-4210. (SDC/ BIDD)

**West Chester**—Geography and Planning, West Chester University. 215-436-2889. (SDC/ BIDD)

**Williamsport**—Lycoming County Planning Commission. 717-327-2230. (SDC/ BIDD)

**York**—York County Planning Commission. 717-771-9550. (SDC/ BIDD)

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- Aguadilla**—Universidad de Puerto Rico, Colegio Regional de Aguadilla. 809-890-2681  
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- Arecibo**—Universidad Interamericana, Colegio Regional de Arecibo. 809-878-5475
- Barranquitas**—Universidad Interamericana, Colegio Regional de Barranquitas. 809-857-3600
- Bayamon**—Colegio Universitario Tecnológico de Bayamon, Universidad de Puerto Rico. 809-786-5225  
Oficina de Planificacion, Municipio de Bayamon. 809-787-0451
- Carolina**—Oficina de Planificacion y Presupuesto, Municipio de Carolina. 809-757-2626 ext. 355
- Cayey**—Colegio Universitario de Cayey, Universidad de Puerto Rico. 809-738-2161
- Fajardo**—Universidad Interamericana, Colegio Regional de Fajardo. 809-863-2390
- Humacao**—Colegio Universitario de Humacao. 809-852-2525 ext. 272
- Ponce**—Universidad Catolica de Ponce. 809-841-2000 ext. 187  
Colegio Universitario Tecnológico de Ponce, Universidad de Puerto Rico. 809-844-8181 ext. 332
- Rio Piedras**—Sistemas de Bibliotecas, Edificio Jose M. Lazaro. 809-764-0000 ext 3296  
Fundacion Educativa Ana G. Mendez, Universidad del Turabo. 809-744-8791 ext 254  
Universidad de Puerto Rico, Planificacion y Desarrollo. 809-764-0000 ext. 3448
- San German**—Universidad Interamericana, Recinto de San German. 809-892-5115 ext. 3336
- San Juan**—Oficina de Planificacion y Presupuesto, Municipio de San Juan. 809-724-7171  
Recinto Universitario de Ciencias Medicas. 809-758-2525 ext. 1415  
Camara de Comercio de Puerto Rico. 809-721-6060
- Santurce**—Departamento de Servicios Sociales. 809-725-1804
- Utua**—Colegio Regional de la Montana, Universidad de Puerto Rico. 809-894-2828 ext 217

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**Affiliates**

- Bristol**—Library, Roger Williams College. 401-253-1040
- Coventry**—Coventry Public Library. 401-822-9100
- Cranston**—Cranston Public Library. 401-943-9080  
Rhode Island Department of Mental Health, Retardation and Hospitals. 401-464-1714
- Kingston**—Community Planning Department, Rodman Hall, University of Rhode Island. 401-792-2248  
Library, University of Rhode Island. 401-792-4610
- Newport**—Salve Regina College Library. 401-847-6650
- Peace Dale**—South Kingstown Public Library. 401-789-1555
- Providence**—Adams Library, Rhode Island College. 401-456-9604  
House Fiscal Advisory Office. 401-277-2738  
Office of Health Statistics. 401-277-2550  
Providence Department of Planning and Development. 401-351-4300  
Providence Public Library. 401-455-8005  
Rockefeller Library, Brown University, 401-863-2522  
Rhode Island Department of Elderly Affairs. 401-277-6159  
Rhode Island Department of Employment and Training. 401-277-3706  
Rhode Island Department of Health Library. 401-277-2506  
Rhode Island Department of Transportation. 401-277-2694  
Rhode Island Occupational Information Coordinating Committee. 401-272-0830  
Rhode Island State Law Library. 401-277-3275  
Phillips Memorial Library, Providence College. 401-865-2581  
Senate Fiscal Advisory Office, State House. 401-277-2480  
Urban League of Rhode Island. 401-351-5000

- Smithfield**—Hodgson Memorial Library, Bryant College. 401-232-6299
- Warwick**—Warwick Public Library. 401-739-5440  
Learning Resources Center, Community College of Rhode Island. 401-825-2492
- Westerly**—Westerly Public Library. 401-596-2877
- Woonsocket**—Woonsocket Harris Public Library. 401-769-9044

**SOUTH CAROLINA****Lead Agency**

Mike MacFarlane, Division of Research and Statistical Services, South Carolina Budget and Control Board, Rembert Dennis Bldg., Room 425, **Columbia**, 29201. 803-734-3780

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**Affiliates**

- Aiken**—Lower Savannah Council of Governments. 803-649-7981
- Batesburg**—Lexington County Circulating Library. 803-359-6984
- Charleston**—Berkeley-Charleston-Dorchester Council of Governments. 803-577-6990  
Charleston County Library. 803-723-1645
- Columbia**—Richland County Public Library. 803-799-9084  
Central Midlands Regional Planning Council. 803-798-1243
- Conway**—Horry County Library. 803-248-4898
- Florence**—Florence County Library. 803-662-8424  
Pee Dee Regional Council of Governments. 803-669-3138
- Georgetown**—Waccamaw Regional Planning and Development Council. 803-546-8502
- Greenville**—South Carolina Appalachian Council of Governments. 803-242-9733
- Greenwood**—Upper Savannah Council of Governments. 803-229-6627
- Lancaster**—Lancaster County Library. 803-285-1502
- Laurens**—Laurens County Library. 803-984-0596
- Marion**—Marion County Library. 803-423-2244
- Orangeburg**—Orangeburg County Library. 803-531-4636
- Rock Hill**—Catawba Regional Planning Council. 803-327-9041  
York County Library. 803-324-3055
- Sumter**—Santee-Lynches Council of Governments. 803-775-7381  
Sumter County Library. 803-773-7273
- Walterboro**—Colleton County Memorial Library. 803-549-5621

**Yemassee**—Lowcountry Council of Governments. 803-726-5536

## SOUTH DAKOTA

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Learning Resource Center, Northern State College. 605-622-2645

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**Glendive**—Library, Dawson Community College. 406-365-3396

**Madison**—Mundt Library, Dakota State College. 605-256-5207

**Pierre**—United Sioux Tribes of South Dakota Development Corporation. 605-224-1375

Governor's Office of Economic Development. 605-773-5032

**Rapid City**—Black Hills Council of Local Governments. 605-394-2681

**Sioux Falls**—Sioux Falls Planning Department. 605-339-7133  
Southeast Council of Governments. 605-339-6515

**Spearfish**—Library Learning Center, Black Hills State College. 605-642-6833

**Watertown**—First District Association of Local Governments. 605-886-7224

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**Columbia**—South Central Tennessee Development District. 615-381-2040

**Cookeville**—Upper Cumberland Development District. 615-432-4111

**Jackson**—Southwest Tennessee Development District. 901-422-4041

**Johnson City**—First Tennessee Development District. 615-928-0224

**Knoxville**—East Tennessee Development District. 615-584-8553  
Knoxville-Knox County Metropolitan Planning Commission. 615-521-2500

**Martin**—Northwest Tennessee Development District. 901-587-4215  
Library, University of Tennessee at Martin. 901-587-7065

**Memphis**—Memphis and Shelby County Office of Planning and Development. 901-576-6763

Memphis Delta Development District. 901-576-4610

Bureau of Business and Economic Research, Memphis State University. 901-678-2281

Government Documents Department Library, Memphis State University. 901-678-2206

**Nashville**—Department of Economic and Community Development. 615-741-1995

Greater Nashville Regional Council. 615-259-5491

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**Amarillo**—Panhandle Regional Planning Commission. 806-372-3381

**Arlington**—North Central Texas Council of Governments. 817-640-3300

**Austin**—Bureau of Business Research, University of Texas at Austin. 512-471-1616

Capitol Area Planning Council. 512-443-7653

**Belton**—Central Texas Council of Governments. 817-939-1801

**Bryan**—Brazos Valley Development Council. 409-776-2277

**Carrizo Springs**—Middle Rio Grande Development Council. 512-876-3533

**Corpus Christi**—Coastal Bend Council of Governments. 512-883-5743

**Denison**—Texoma Regional Planning Commission. 214-786-2955

**Edinburg**—School of Business Administration, University of Texas-Pan American. 512-381-3361

School of Social Sciences, University of Texas—Pan American. 512-381-3339

**El Paso**—Bureau of Business and Economic Research, University of Texas at El Paso. 915-747-5122

City of El Paso Planning Department. 915-541-4721

Rio Grande Council of Governments. 915-533-0998

**Houston**—Houston-Galveston Area Council. 713-627-3200

Department of Political Science, Rice University. 713-523-2417

**Jasper**—Deep East Texas Council of Governments. 409-384-5704

**Kilgore**—East Texas Council of Governments. 214-984-8641

**Laredo**—South Texas Development Council. 512-722-3995

**Lubbock**—Department of Sociology, Texas Tech University. 806-742-2409

South Plains Association of Governments. 806-762-8721

**McAllen**—Lower Rio Grande Valley Development Council. 512-682-3481

**Midland**—Permian Basin Regional Planning Commission. 915-563-1061

**Nacogdoches**—Political Science Department, Stephen F. Austin State University. 409-568-3903

**Nederland**—Southeast Texas Regional Planning Commission. 409-727-2384

**Richardson**—Center for Development Studies, University of Texas at Dallas. 214-690-2088

**San Angelo**—Concho Valley Council of Governments. 915-944-9666

**San Antonio**—Center for Studies in Business, University of Texas at San Antonio. 512-691-4317

Alamo Area Council of Governments. 512-225-5201

**Texarkana**—Ark-Tex Council of Governments. 214-832-8636

**Victoria**—Golden Crescent Regional Planning Commission. 512-578-1587  
**Waco**—Heart of Texas Council of Governments. 817-756-7822  
**Wichita Falls**—Nortex Regional Planning Commission. 817-322-5281

## UTAH

### Lead Agency

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### Affiliates

**Blanding**—Utah Navajo Development Council. 801-678-2285. (BIDC)  
**Bountiful**—Wasatch Front Regional Council. 801-292-4469. (BIDC)  
**Cedar City**—Library, Southern Utah State University. 801-586-7946  
 Small Business Development Center. 801-586-5405. (BIDC)  
**Fort Duchesne**—Wte Indian Tribe. 801-722-5141  
**Logan**—Bear River Association of Governments. 801-752-7242. (BIDC)  
 Merrill Library, Utah State University. 801-750-2683  
 Population Research Laboratory, Utah State University. 801-750-1231  
 Cashe County Economic Development. 801-753-3631. (BIDC)  
**Meab**—Grand County Economic and Community Development. 801-259-6388. (BIDC)  
**Ogden**—Stewart Library, Weber State University. 801-626-6415  
 Weber Economic Development Corporation 801-627-1333. (BIDC)  
**Park City**—Park City Chamber/ Bureau. 801-649-6100. (BIDC)  
**Price**—Southeastern Association of Governments. 801-637-5444. (BIDC)  
**Provo**—Lee Library, Brigham Young University. 801-378-4090  
 Mountainlands Association of Governments. 801-377-2262. (BIDC)  
 Utah Valley Economic Development Association. 801-370-8100. (BIDC)  
**Richfield**—Six County Association of Governments. 801-896-9222. (BIDC)  
**Roosevelt**—Unitah Basin Association of Governments. 801-722-4518. (BIDC)  
**Salt Lake City**—Bureau of Health Statistics, Department of Health. 801-538-6186

Department of Employment Security. 801-533-2372  
 Marriott Library, University of Utah. 801-581-8394  
 Salt Lake City Library. 801-363-5733  
 Salt Lake County Library System. 801-943-4636  
 State Education Office. 801-538-7802  
 State Library Division of Utah. 801-466-5888  
 Utah Foundation. 801-364-1837  
 Utah League of Cities and Towns. 801-328-1601  
 Utah Issues. 801-521-2035  
 Utah Economic Development Corporation. 801-328-8824. (BIDC)  
 Small Business Development Center. 801-581-7905. (BIDC)  
**St. George**—Five County Association of Governments. 801-673-3548  
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**Arlington**—Bennington County Regional Planning Commission. 802-375-9964  
**Bennington**—Bennington Free Library. 802-442-9051  
**Brattleboro**—Windham Regional Planning Development Commission. 802-257-4547  
 Brooks Memorial Library. 802-254-5290  
**Burlington**—Howe Library, University of Vermont. 802-656-2503 ext. 34  
**Castleton**—Coolidge Library, Castleton State College. 802-468-5615  
**Essex Junction**—Chiltenden County Regional Planning Commission. 802-658-3004  
**Johnson**—Dewey Library, Johnson State College. 802-635-2356  
**Lyndonville**—Library, Lyndon State College. 802-626-9371  
**Middlebury**—Addison County Regional Planning and Development Commission. 802-388-3141  
 Middlebury College Library. 802-388-3711  
**Montpelier**—Central Vermont Regional Planning Commission. 802-229-0389

Office of Geographic Information. 802-828-3447  
**Morrisville**—Morristown Centennial Library. 802-888-3853  
 Lamoille County Development Council. 802-888-4548  
**Newport**—Goodrich Memorial Library. 802-334-7902  
**Rutland**—Rutland Free Library. 802-773-1860  
 Rutland Regional Commission. 802-775-0871  
**South Royalton**—Vermont Law Library. 802-763-8303  
**Springfield**—Springfield Town Library. 802-885-3108  
**St. Albans**—Franklin-Grand Isle Regional Commission. 802-524-6979  
 St. Albans Free Library. 802-527-0585  
**St. Johnsbury**—Northeastern Vermont Development Association. 802-748-5181  
 St. Johnsbury Athenaeum. 802-748-8291  
**Windsor**—Southern Windsor Regional Planning Development Commission. 802-674-9241  
**Woodstock**—Two Rivers-Ottawaquechee Regional Commission. 802-457-3188

## VIRGIN ISLANDS

### Lead Agency

Dr. Frank Mills, University of the Virgin Islands, Caribbean Research Institute, Charlotte Amalie, **St. Thomas**, 00802. 809-776-9200 ext. 1238

### Coordinating Agency

Dan Inzeen, Department of Economic Development and Agriculture, Bureau of Economic Research, P.O. Box 6400, Charlotte Amalie, **St. Thomas**, 00801. 809-774-8784

### Affiliates

**Charlotte Amalie, St. Thomas**—University of the Virgin Islands Library. 809-776-9200 ext. 1483  
 Libraries, Archives, and Museums. 809-774-3407  
 Department of Human Services, Office of Planning and Development. 809-774-0930  
 Department of Planning and Natural Resources. 809-774-1730  
 Department of Health, Knud Hansen Hospital. 809-774-1734  
 Enid M. Baa Library, Von Schoulton Collection. 809-774-0630  
**Christiansted, St. Croix**—Florence Williams Public Library. 809-773-5715  
 Health Plan Developer II, Charles Harwood Memorial Hospital. 809-773-4050  
 Small Business Development Agency. 809-773-2161  
 Department of Planning and Natural Resources. 809-773-1082

**Kingshill, St. Croix**—University of the Virgin Islands Library. 809-778-1620

## VIRGINIA

### Lead Agency

Dan Jones, Virginia Employment Commission, 703 East Main Street, **Richmond**, 23219. 804-786-8308

### Coordinating Agencies

Dr. Michael Spar, Center for Public Service, University of Virginia, Dynamics Building, 4th Floor, 2015 Ivy Road, **Charlottesville**, 22903-1795. 804-924-7451  
Robert Keeton, State Library, Documents Section, 11th and Capitol Streets, **Richmond**, 23219. 804-786-2175

### Affiliates

**Accomac**—Accomack-Northampton Planning District Commission. 804-787-2936  
**Annandale**—Northern Virginia Planning District Commission. 703-642-0700  
**Callao**—Northern Neck Planning District Commission. 804-529-7400  
**Charlottesville**—Thomas Jefferson Planning District Commission. 804-972-1720  
**Chesapeake**—Hampton Roads Planning District Commission. 804-420-8300  
**Culpeper**—Rappahannock-Rapidan Planning District Commission. 703-829-7450  
**Duffield**—LENOWISCO Planning District Commission. 703-431-2206  
**Farmville**—Piedmont Planning District Commission. 804-392-6104  
**Fredericksburg**—RADCO Planning District Commission. 703-373-2890  
**Front Royal**—Lord Fairfax Planning District Commission. 703-635-4146  
**Lebanon**—Cumberland Plateau Planning District Commission. 703-889-1778  
**Lynchburg**—Central Virginia Planning District Commission. 804-845-3491  
**Marion**—Mount Rogers Planning District Commission. 703-783-5103  
**Martinsville**—West Piedmont Planning District Commission. 703-638-3987  
**Petersburg**—Crater Planning District Commission. 804-861-1666  
**Radford**—New River Valley Planning District Commission. 703-639-9313  
**Richmond**—Richmond Regional Planning District Commission. 804-358-3684  
**Roanoke**—Fifth Planning District Commission. 703-343-4417  
**Saluda**—Middle Peninsula Planning District Commission. 804-758-2312  
**South Hill**—Southside Planning District Commission. 804-447-7101  
**Staunton**—Central Shenandoah Planning District Commission. 703-885-5174

## WASHINGTON

### Lead Agency

Sharon Estee, Estimation and Forecasting Unit, Office of Financial Management, 450 Insurance Building, MS:AQ-44, **Olympia**, 98504-0202. 206-586-2504. (SDC/BIDC)

## Coordinating Agencies

Lucky Tedrow, Demographic Research Laboratory, Department of Sociology, Western Washington University, **Bellingham**, 98225. 206-676-3617  
David Kaufman, Applied Social Data Center, Department of Sociology, Central Washington University, **Ellensburg**, 98926. 509-963-1305  
Ann Bregent, State Library, Documents Section, AJ 11, **Olympia**, 98504. 206-753-4027  
Dr. Annabel Kirschner Cook, Department of Rural Sociology, Washington State University, **Pullman**, 99164-4006. 509-335-4519  
Elaine Murakami, Puget Sound Council of Governments, 216 1st Avenue South, **Seattle**, 98104. 206-464-5355  
Gary Bodeutsch, LMEA, Department of Employment Security, 212 Maple Park, Mail Stop KG-11, **Olympia**, 98504. 206-438-4804. (BIDC)  
Fred Nick, CSSCR, University of Washington, 145 Savery Hall, DK 45, **Seattle**, 98195. 206-543-8110.

### Affiliates

**Aberdeen**—Grays Harbor Regional Planning Council. 206-532-8812. (SDC/BIDC)  
**Bellingham**—Whatcom County Coq. 206-676-6974. (SDC/BIDC)  
**Colville**—Trico Economic Development District. 509-684-4571. (SDC/BIDC)  
**Olympia**—Kelso—Cowlitz-Wahkiakim Governmental Conference. 206-577-3041  
Department of Trade and Economic Development. 206-464-6282  
Thurston Regional Planning Council. 206-786-5480. (SDC/BIDC)  
**Pullman**—Cooperative Extension, Washington State University. 509-335-2811. (SDC/BIDC)  
**Seattle**—King County Library System. 206-684-6632. (SDC/BIDC)  
Land Information Development System. 206-296-8635  
Graduate School of Business, University of Washington. 206-543-1579  
Office for Long-range Planning. 206-684-8369  
**Richland**—Benton-Franklin Regional Council. 509-943-9185  
**Spokane**—Spokane Regional Council. 509-456-4340. (SDC/BIDC)  
**Tacoma**—Center for Social Research, Pacific Luthern University. 206-536-5065  
**Vancouver**—Intergovernmental Resource Center. 206-699-2361. (SDC)  
Cannell Library, Clark College. 206-699-0443

**Yakima**—Yakima Valley COG. 509-575-4372

## WEST VIRGINIA

### Lead Agencies

Mary C. Harless, Governor's Office of Community and Industrial Development, Research and Strategic Planning Div., Capitol Complex, Bldg. 6, Rm. 553, **Charleston**, 25305. 304-348-4010. (SDC)  
Linda Culp, Center for Economic Research, West Virginia University, 323 Business and Economics Bldg., **Morgantown**, 26506-6025. 304-293-7832. (BIDC)

### Coordinating Agencies

Karen Goff, West Virginia Library Commission, Science and Cultural Center, Capitol Complex, **Charleston**, 25305. 304-348-2045  
Stephanie Pratt, Office of Health Services Research, Health, West Virginia University, Health Sciences Center South, **Morgantown**, 26506. 304-293-2601

### Affiliates

**Buckhannon**—Region VII Planning and Development Council. 304-472-6564. (BIDC)  
**Charleston**—Department of Employment Security. 304-348-2660. (BIDC)  
Small Business Development Center. 304-348-2960. (BIDC)  
West Virginia Chamber of Commerce. 304-342-1115. (BIDC)  
West Virginia Research League, Inc. 304-346-9451. (BIDC)  
**Cumberland, Maryland**—Tri-County Council for Western Maryland. 301-777-2158  
**Dunbar**—Region III Planning and Development Council. 304-768-8191. (SDC/BIDC)  
**Fairmont**—Library, Fairmont State College. 304-367-4121  
Monongahela Power Company. 304-367-3107. (BIDC)  
Region VI Planning and Development Council. 304-366-5693. (BIDC)  
**Glenville**—Kidd Library, Glenville State College. 304-462-7361  
**Huntington**—Center for Regional Progress, Marshall University. 304-696-6258. (BIDC)  
Morrow Library, Marshall University. 304-696-2342  
Region II Planning and Development Council. 304-529-3357. (SDC/BIDC)  
**Institute**—Drain-Jordan Library, West Virginia State College. 304-766-3116  
**Keyser**—Shipper Library, Potomac State College. 304-788-3011  
**Martinsburg**—Region IX Planning and Development Council. 304-263-1743. (SDC/BIDC)  
Evansdale Library, West Virginia University. 304-293-4695

**Parkersburg**—Region V Planning and Development Council. 304-295-9312. (SDC/BIDC)

**Petersburg**—Region VIII Planning and Development Council. 304-257-1221. (SDC/BIDC)

**Princeton**—Region I Planning and Development Council. 304-425-9508. (SDC/BIDC)

**Steubenville, Ohio**—Region XI Planning and Development Council. 614-282-3685. (SDC/BIDC)

**Summersville**—Region IV Planning and Development Council. 304-872-4970. (SDC/BIDC)

**Wheeling**—Library, West Virginia Northern Community College. 304-233-5900  
BEL-O-MAR Regional Council. 304-242-1800. (SDC/BIDC)

## WISCONSIN

### Lead Agencies

Robert Naylor, Demographic Services Center, Department of Administration, 101 South Webster Street, 6th Floor, P.O. Box 7868, **Madison**, 53707-7868. 608-266-1927

Michael Knight, Applied Population Laboratory, Department of Rural Sociology, University of Wisconsin, 1450 Linden Drive, Room 316, **Madison**, 53706. 608-262-3097. (BIDC)

### Affiliates

**Appleton**—Fox Cities Chamber of Commerce and Industry. 414-734-7101. (BIDC)

**Eau Claire**—L.E. Phillips Memorial Public Library. 715-839-5004  
West Central Wisconsin Regional Planning Commission. 715-836-2918

**Green Bay**—Bay-Lake Regional Planning Commission. 414-448-2820  
Green Bay Area Chamber of Commerce. 414-437-8704. (BIDC)

**Janesville**—Department of Economic Development. 608-755-3180. (BIDC)  
Rock County Planning and Development Department. 608-755-2087

**Juneau**—Dodge County Planning and Development Department. 414-386-3700

**Kenosha**—Library, University of Wisconsin-Parkside. 414-553-2730

**LaCrosse**—Mississippi River Regional Planning Commission. 608-785-9396

**Lac du Flambeau**—Great Lakes Inter-Tribal Council. 715-588-3324

**Madison**—Business Information Center, Wisconsin Department of Development. 608-266-1386. (BIDC)  
Center for Small Business Management and Entrepreneurship. 608-263-1664. (BIDC)  
Community and Economic Development Unit. 608-267-8721. (BIDC)

Dane County Regional Planning Commission. 608-266-4593  
Department of Industry, Labor, and Human Relations. 608-266-2832  
Madison Gas and Electric Company. 608-252-7116. (BIDC)  
Management Institute. 608-262-7878. (BIDC)  
Public Expenditure Survey. 608-255-6767. (BIDC)  
Recreation Resources Center. 608-263-2621. (BIDC)  
School of Business, University of Wisconsin. 608-263-3902. (BIDC)  
University of Wisconsin Extension. 608-263-7794. (BIDC)  
Wisconsin Department of Agriculture, Trade and Consumer Protection. 608-267-3311. (BIDC)  
Wisconsin Economic Development Association. 608-255-5666. (BIDC)  
Wisconsin Insurance Alliance. 608-255-1748. (BIDC)  
Wisconsin Manufacturers and Commerce. 608-258-3400. (BIDC)  
Wisconsin Realtors Association. 608-241-2047. (BIDC)

**Menasha**—East Central Wisconsin Regional Planning Commission. 414-751-4770

**Menomonie**—Library, University of Wisconsin-Stout. 715-232-1402

**Milwaukee**—Employment and Training Institute, University of Wisconsin-Milwaukee. 414-229-6387. (BIDC)  
Metropolitan Milwaukee Association of Commerce. 414-273-3000. (BIDC)  
Milwaukee Minority Business Development Center. 414-332-6268. (BIDC)  
Social Development Commission. 414-272-5600

**Oshkosh**—Oshkosh Public Library. 414-236-5228  
Winnebago County Planning Department. 414-236-4837 ext. 245

**Platteville**—Industrial Development Center, University of Wisconsin-Platteville. 608-342-1458. (BIDC)  
Southwestern Wisconsin Regional Planning Commission. 608-342-1214

**Rhinelander**—Nicolet College, Learning Resources Center. 715-369-4486

**Shawano**—Wisconsin Towns Association. 715-526-3157. (BIDC)

**Spooner**—Northwest Regional Planning Commission. 715-635-2197

**Sturgeon Bay**—Door County Economic Development Corporation.

**Superior**—Small Business Development Center, University of Wisconsin-Superior. 715-894-8544. (BIDC)

**Waukesha**—Southeast Wisconsin Regional Planning Commission. 414-547-6271

**Wausau**—North Central Wisconsin Regional Planning Commission. 715-845-4208  
Marathon County Planning Commission. 715-847-5598

**Whitewater**—Wisconsin Innovation Service Center, University of Wisconsin-Whitewater. 414-472-1365. (BIDC)

**Wisconsin Rapids**—Wood County Planning Office. 715-421-8466

## WYOMING

### Lead Agency

Greg McCollum, Research and Statistics Division, Department of Administration and Fiscal Control, Emerson Building, Rm. 327E, **Cheyenne**, 82002-0060. 307-777-7504

### Coordinating Agency

G. Fred Doll, Survey Research Center, University of Wyoming, P.O. Box 3925, **Laramie**, 82071. 307-766-2931

### Affiliates

**Casper**—Casper College Library. 307-268-2269  
Gillette—Campbell County Library. 307-682-3223  
Powell—Northwest Community College. 307-754-6207  
Riverton—Library, Central Wyoming College. 307-856-9291

**Rock Springs**—Western Wyoming Community College Library. 307-382-1600

**Sheridan**—Sheridan College Library. 307-674-6446

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## NATIONAL CLEARINGHOUSE

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The letters following the telephone numbers of organizations in the National Clearinghouse for Census Data Services listing indicate the services provided by the organization. The following list indicates what services or data holdings the code letters represent.

### Service Codes

- A. General services  
*a—Tape copies, printouts, extracts*  
*b—Software for accessing census data*  
*c—Personal computer services: diskettes, downloading, etc.*  
*d—Online data services*  
*e—CD-ROM products and services*  
*f—Estimates and projections, forecasting*  
*g—Tabulations from microdata*  
*h—Market segmentation - site location*  
*i—Other market research services*  
*j—Training/consulting*
- B. Data specialization  
*a—Demographic/ socioeconomic*  
*b—ZIP code information*  
*c—Economic - retail trade*  
*d—Economic - foreign trade*  
*e—Economic - other*
- C. Data holdings  
*a—National data*  
*b—Regional data*  
*c—Local data*

## D. Geographic services

- a—Geocoding/ address matching
- b—Mapping and cartography
- c—Business graphics
- d—Redistricting services
- e—Routing or delivery assistance
- f—Training/ consulting
- g—Geographic Information Systems
- h—Other

## E. Other

- a—Software development
- b—Newsletter/ technical journal
- c—Other

**ALABAMA**—Intergraph Corporation, Mapping and GIS Marketing Department, Map Stop IW17A2, Huntsville, AL 35894-0001. Andrew Weatherington. 205-730-2000. *Ab, Aj, Da-Db, Df-Dh, Ea*

Locational Data Systems, Inc., 309 Canal Street, NE, Decatur, AL 35601. James Skiles/ Andy Kinney. 205-340-1480. *Da-Dc, Df-Dh*

**ARIZONA**—GIS Southwest, 1245 E. Topeka Drive, Phoenix, AZ 85024-2374. B.J. Raval. 602-254-0977. *Db, Dg*

Glimpse Econometrics, P.O. Box 5738, Scottsdale, AZ 85261-5738. Richard Froncek. 602-948-7688. *Af, Ah-Aj, Ba, Bc-Be, Ca-Cc, Ea*

**CALIFORNIA**—Advanced Technology Center, 2298 Millcreek Drive, Laguna Hills, CA 926543. Larry Paulson. 714-583-9119. *Db, Dh*

Area Location Systems, Inc., 9410 Tapanga Canyon Boulevard, Suite 110, Northridge, CA 9111-5758. Mark Behnke. 818-993-4275. *Ab-Aj, Ba-Bc, Cb, Da-Db, Dg, Ea*

Biddle & Associates, Inc., 903 Enterprise Drive, Suite 1, Sacramento, CA 95825. Cheryl Morgan. 800-999-0438. *Aa, Ba, Ca-Cc, Ea, Ec*

Brighter Images, Inc., 936 Dewing Avenue, Suite J, Lafayette, CA 94549. Larry Fulcher. *Dc*

Coast Meridian Marketing, Inc., 4029 West-erly Place, Suite 113, Newport Beach, CA 92660. 714-752-8622

DATA QUICK, 9171 Town Center Drive, Suite 600, San Diego, CA 92122-1240. Lynn Sites. 619-455-6900. *Aa-Ad, Af, Ah, Aj, Ba, Bc, Cb, Da-Dg, Ea-Eb*

Demographic Research Company, 2221 Rosecrans Avenue, Suite 111, El Segundo, CA 90245-4911. Joseph J. Weissmann. 213-643-7588. *Af-Aj, Ba-Bc, Ca-Cc, Da-Db, Df-Dg*

Dynamic Ventures, 992 Inverness Way, Sunnyvale, CA 94087. Myrna Ehrlich. 408-732-7593. *Da, Dh, Ea*

ESRI, Marketing Department, 380 New York Street, Redlands, CA 92373. Earl Nordstrand. 714-793-2853. *Ab, Aj, Ca, Da-Db, Dd, Df-Dg, Ea-Eb*

ETAK, Inc., 1430 O'Brien Drive, Menlo Park, CA 94025. William L. Folchi. 415-328-3825. *Ab, Ae, Ca-Cc, Da-Db, Ea*

Educational Data Systems, Inc., 901 Campisi Way, Suite 160, Campbell, CA 95008. William Gilmore. 408-559-4424. *Aa-Ac, Af, Ba, Ca-Cc, Da-Db, Dd-Dg, Dg-Dh, Ea*

Equifax National Decision Systems, 539 Encinitas Boulevard, Encinitas, CA 92024-9007. Daniel Davies. 619-942-7000. *Ab, Ae, Ah-Aj, Ba, Ca-Cc, Da-Db, Df*

Expert Database Marketing Systems, 15707 Rockfield Boulevard, Suite 250, Irvine, CA 92718. David Deeter. 714-768-5775. *Da, Dd, Dg-Dh*

Facility Mapping Systems, Inc., 38 Miller Avenue, Suite 11, Mill Valley, CA 94941. Dennis Klein/ Lynne Finlay. 415-381-1750. *Db, Dd, Dh, Ea*

Foreign Trade Data Services, 17527 Live Oak Circle, Fountain Valley, CA 92708. Don Dennison. 714-964-9898. *Aa, Acc, Bd, Ca-Cc*

GEOSOFT Corporation, 3547 Old Conejo Road, Suite 102, Newbury Park, CA 91320. Mike Anderson. 805-499-2446. *D, Ea*

Klynas Engineering, P.O. Box 499, Simi Valley, CA 93062-0499. Scott Klynas. 805-529-1717. *Aa-Ab, Ba-Bc, Ca-Cc, Da-Dc, De, Dg, Ea*

National Planning Data Corporation, 1801 Avenue of the Stars, Suite 729, Los Angeles, CA 90067. Mark Reising. 213-557-0158. *Aa-Ai, Ba-Bb, Ca-Cc, Db-Dd, Dh, Ea-Eb*

Nobi Takahashi and Associates, P.O. Box 1319, Oakland, CA 94604. Nobi Takahashi. 415-465-0293. *Af, Ah-Aj, Bc, Be, Dc*

Recordata West, Inc., 2501 West Burbank Blvd., Suite 202, Burbank, CA 91505. Edward Kasman. 818-954-0132. *Da-Db, De, Ea*

Renaissance Automation, 4455 Torrance Blvd., Suite 342, Torrance, CA 90503. Charlie Szymanski. 301-375-6922. *Da-Dc, De-Dh*

SciData Research, Inc., 3244 Camino Diablo, Lafayette, CA 94549. Albert Borden. *Aa, Ac, Ba-Bc, Da-Db, De-Dh, Ea*

SourcePoint, 401 B. Street, Suite 800, San Diego, CA 92101. Eunice Tanjuaquio. 619-595-5353. *Aa-Ac, Af-Ai, Ba-Bc, Be, Cc, Da-Dc, De, Dg-Dh*

Strategic Mapping, Inc., 4030 Moorpark Avenue, Suite 250, San Jose, CA 95117. Lanning Forrest. 408-985-7400. *Ab, Ae-Af, Ba-Bc, Be, Ca-Cb, Db-Dg, Ea-Eb*

STREET WISE, 2910 Neilson Way, Suite 604, Santa Monica, CA 90405. Frank Hoeschler. 213-452-1787. *Da-Db, De, Dh, Ea*

Thomas Bros. Maps, 17931 Cowan, Irvine, CA 92714. Charles F. Cone. 714-863-1984. *Aa, Ah, Aj, Cb, Da-Db, Dg, Ea*

Urban Decision Systems, Inc., 2040 Armacost Avenue, Los Angeles, CA 90025. John Hobson. 213-820-8931. *Aa-Af, Ah-Aj, Ba-Bc, Be, Ca, Da-Dd, Df-Dh, Ea*

Urban Microsystems, 1305 Franklin Street, Suite 2001, Oakland, CA 94612. Poulicos Prastacos. 415-836-0804. *Db, Ea*

Western Economic Research Co., Inc., 8155 Van Nuys Boulevard, Suite 100, Panorama City, CA 91402. Michael Long. 818-787-6277. *Aa, Ac, Af, Aj, Ba-Bb, Be, Ca, Da-Dd, Df-Dh, Ea*

**COLORADO**—GENASYS, Inc., 2629 Redwing Road, Suite 330, Fort Collins, CO 80526. Tom Bramble. 303-226-3283. *Ab, Db-Dg, Ea-Eb*

GIS World, Inc., 2629 Redwing Road, Suite 280, Ft. Collins, CO 80526. Derry Eynon. 303-223-4848. *Df, Dh, Eb*

Generation 5 Technology, Inc., 8670 Wolff Court, Suite 200, Westminster, CO 80030. Rick Garfield. 303-427-0055. *Ab-Ac, Ae, Aj, Ba-Bb, Da-Dg, Ea-Eb*

GeoSpatial Solutions, Inc., 2450 Central Avenue, Suite E-1, Boulder, CO 80301. Caren McMahan. 303-442-6622. *Ac, Af, Ah, Bb, Cc, Db, Dg*

Leica, Inc., 303 East 17th Avenue, Suite 440, Denver, CO 80112. Rob Van Westenberg. 303-799-9453. *Db, Df-Dg, Ea*

Micro Map & CAD, 9642 W. Virginia Circle, Lakewood, CO 80226. Randy George. 303-988-4940. *Ab-Ac, Ca, Db, Df, Ea*

Precision Visuals, Inc., 6260 Lookout Road, Boulder, CO 80301. Chris Logan. 303-530-9000. *Ea-Eb*

Public Systems Associates, Inc., 303 East 17th Avenue, Suite 440, Denver, CO 80203. Craig Butler/ Richard Stansbury. 303-831-1260. *Db, Df, Ea*

SMARTSCAN, Inc., 2344 Spruce Street, Boulder, CO 80302. Rebecca Culp. 303-443-7226. *A, D*

**CONNECTICUT**—Donnelley Marketing Info. Services, 70 Seaview Avenue, Stamford, CT 06904. Jack Proehl. 203-353-7295. *Aa-Aj, Ba-Bc, Ca, Da-Dd, Df-Dg*

Labtek Corporation, 565 Wagon Trail, Orange, CT 06477-2171. Thomas Griest. 203-877-2880. *D*

Robert H. Frost, P.O. Box 495, Essex, CT 06426. Bob Frost. 203-767-1254. *Aa-Ac, Aj, Bb, Ca-Cc, Da-Dg, Ea*

**DISTRICT OF COLUMBIA**—Charles R. Mann Associates, Inc., 1828 L Street, N.W., Washington, DC 20036-5104. Charles R. Mann. 202-466-6161. *Aa, Ac, Af-Ag, Ai-Aj, Ba, Ca-Cc, Ea*

Colman Levin and Associates, 2301 N Street, N.W., Suite 306, Washington, DC 20036. Colman Levin. 202-223-0716. *Ah-Ai, Ba-Bb, Df*

Election Data Services, 1522 I Street, N.W., Suite 700, Washington, DC 20005. Ronda Sternberg. 202-789-2004. *Aa-Ab, Aj, Ba, Be, Ca-Cc, Da-Dd, Df-Dg, Ea*

- International Data and Development, 2100 M Street, Suite 200, Washington, DC 20037. 202-872-5245. *Aa-Ae, Aj, Ca-Cc*
- National Safety Council, 1019 19th Street, Room 401, Washington, DC 20036. 202-293-2270. *Db, Dh*
- Slater Hall Information Products, 1522 K Street N.W., Suite 522, Washington, DC 20005. George Hall/ Courtney Slater. 202-682-1350. *Ae, Aj, Ba-Bb, Be, Da-Dd*
- System Dynamics Incorporated, 409 12th Street S.W., Suite LL10, Washington, DC 20024-2101. Mark Fisher Bryant. 202-863-3840. *Dd, Df, Dh*
- US Environmental Protection Agency, Chemical Emergency Preparedness & Prevention Office (OS-120), Washington, DC 20406. Tony Jover/ Melanie Hoff. 202-260-5338. *Db, Dh, Ea*
- FLORIDA**—Behavioral Science Research, 2121 Ponce de Leon Boulevard, Suite 1250, Coral Gables, FL 33134. Robert A. Ladner. 305-443-2000. *Ac, Af-Aj, Ba-Bb, Ca-Cc, Df, Dh, Ec*
- ComGrafix, Inc., 620 E Street, Clearwater, FL 34616. Kerry Mitchell. 813-443-6807. *Aa-Ac, Ae, Aj, Db-Dc, Df-Dg, Ea*
- THG Publishing Company, P.O. Box 1621, St. Petersburg, FL 33731-1621. Mr. Francis L. Hanigan. *Aj, Be, Dg, Eb*
- University of Florida Libraries, Census Access Program, Library West 148, Gainesville, FL 32611. Ray Jones. *Aa, Ac*
- University of South Florida, Center for Economic & Mgt. Research, College of Business Administration, 4202 E Fowler Avenue, Tampa, FL 33620-5500. Thomas A. Charles. 813-974-4266. *Aa, Ac, Af, Ai, Ba-Bb, Ca-Cc*
- GEORGIA**—CSRA Regional Development Center, 2123 Wrightsboro Rd., P.O. Box 2800, Augusta, GA 30914-2800. David Jenkins. 404-737-1823. *Ai, Ba, Cb-Cc, Da-Dc, De, Dg*
- ERDAS, Inc., 2801 Buford Highway, Suite 300, Atlanta, GA 30329. Andrea Gernazian. 404-248-9000. *Db, Df-Dh, Ea*
- GEOVISION, Inc., 5680 Peachtree Parkway, Norcross, GA 30092. Kenneth S. Shain. 404-448-8224. *Aa-Ac, Ae, Aj, Ca-Cc, Dg-Dh, Ea-Ec*
- Lowe Engineers, Inc., 7100 Peachtree Dunwoody Road, Atlanta, GA 30328-1615. Bill Bersson. 404-399-6400. *Aa-Ad, Af-Ai, Ba-Bb, Ca-Cc, Da-Db, Dg*
- Montage Information Systems, Inc., 1650 Oakbrook Drive, Suite 435, Norcross, GA 30093. Ronald Lingerfelt. 404-840-0183. *Ab, Ae, Aj, Ba-Bb, Ca-Cc, Da-Dc, De-Dg, Ea-Eb*
- Spatial Technologies, Inc., 430 10th Street, ATDC, Suite S 101, Atlanta, GA 30318. Joseph G. Jay. 404-892-4780. *Da-Dd, Dg*
- IDAHO**—Geographic General, Inc., 3350 Americana Terrace, Suite 320, Boise, ID 83706. Dave Spencer. 208-343-1181. *Ba, Ca, Dj-Dg*
- Idaho State University, Center for Business Reseach & Services, Campus Box 8450, Pocatello, ID 83209. Dr. Paul Zelus. 208-236-2504. *Ac, Ae, Ag, Aj, Ba, Cc, Dc, Df, Eb*
- ILLINOIS**—Concordia College, 7400 Augusta Street, River Forest, IL 60305. Peter M. Becker. 312-771-8300. *Aa, Ac-Ad, Aj, Ba, Ca, Db, Df*
- Decision Sciences Inc., 9133 North Long, Suite 100, Skokie, IL 60077-1171. Chuck Jones. 708-965-1581. *De, Ea*
- Management Graphics, 233 East Wacker Drive, Suite 3011, Chicago, IL 60601. Robert L. Harris. 312-819-0645. *Db*
- Manuel Plotkin Research & Planning, 625 N. Michigan Avenue, Suite 500, Chicago, IL 60611. Manuel Plotkin. 312-751-4270. *Ah-Aj, Ba-Bc, Ca-Cc*
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tennial Office Building, 3rd Floor, 658  
Cedar Street, **St. Paul**, 55155. \*Dr. R.  
Thomas Gillaspy, State Demographer,  
612-296-2557. \*Mr. James Hibbs, Local  
Estimates, 612-296-9036

**Mississippi**

Center for Policy Research and Planning,  
Mississippi Institutions of Higher Learn-  
ing, 3825 Ridgewood Road, No. 427,  
**Jackson**, 39211-6453. Dr. Daniel Lee.  
\*Ms. Barbara Logue, Senior Demogra-  
pher, 601-982-6576.

**Missouri**

Office of Administration, Division of Budget  
and Planning, Capitol, Room 124, Box  
809, **Jefferson City**, 65102. \*Mr. Ryan  
Burson, 314-751-2345. Ms. Susan Jen-  
kins

**Montana**

Bureau of Business and Economic  
Research, University of Montana, Eddy  
Avenue, Business Administration Bldg.,  
Room 209, **Missoula**, 59812. \*Mr.  
James T. Sylvester, 406-243-5113.

**Nebraska**

Nebraska Natural Resources Commission,  
Post Office Box 94876, **Lincoln**, 68509.  
\*Mr. Mahendra K. Bansal, 402-471-  
2081

**Nevada**

Bureau of Business and Economic  
Research, Mail Code 032, College of  
Business Administration, University of  
Nevada-Reno, **Reno**, 89557-0016. \*Dr.  
Maud Naroll, 702-784-6877

**New Hampshire**

New Hampshire Office of State Planning, 2  
1/2 Beacon Street, **Concord**, 03301.  
\*Mr. Thomas J. Duffy, 603-271-2155

**New Jersey**

Division of Labor Market and Demographic  
Research, NJ Department of Labor, CN  
388, Room 200A, **Trenton**, 08625-  
0388. \*Ms. Connie O. Hughes, Assis-  
tant Director, 609-984-2593. Mr. Sen-  
Yuan Wu, 609-292-0076

**New Mexico**

Bureau of Business and Economic  
Research, University of New Mexico,  
1920 Lomas, N.E., **Albuquerque**,  
87131. \*Dr. Adelamar Alcantara, 505-  
277-2216

**New York**

New York State Department of Economic  
Development, One Commerce Plaza,  
Room 905, **Albany**, 12245. \*Mr. Robert  
Scardamalia, 518-474-6005. Mr. David  
Lamphere

**North Carolina**

Office of State Budget and Management,  
116 West Jones Street, Room 5062G,  
**Raleigh**, 27603-8005. \*Mr. William Till-  
man, 919-733-07

**North Dakota**

North Dakota State Census Data Center,  
North Dakota State University of Agri-  
culture and Applied Science, P.O. Box  
5636, **Fargo**, 58105. \*Dr. Richard W.  
Rathge, 701-237-7441 69.

## Ohio

Ohio Data Users Center, Department of Development, Post Office Box 1001, **Columbus**, 43266-0101. \*Mr. Barry Bennett, 614-466-2115.

## Oklahoma

Research and Planning Division, Oklahoma Department of Commerce, P. O. Box 26980, **Oklahoma City**, 73126-0980. \*Ms. Virginia Cosby, 405-841-5175

## Oregon

Center for Population Research and Census, Portland State University, Post Office Box 751, **Portland**, 97207-0751. Dr. Edward A. Schafer. \*Dr. Howard Wineberg, 503-725-3922

## Pennsylvania

Pennsylvania State Data Center, Institute of State and Regional Affairs, Olmsted Building—Room E310, Penn State—Harrisburg, **Middletown**, 17057. Mr. Michael T. Behney, Director, 717-948-6178. \*Mr. Ronald Uroda, 717-948-6336.

## Puerto Rico

Puerto Rico Planning Board, Minillas Government Center, Post Office Box 41119, **San Juan**, 00940-9985. Mr. Santos Negron-Diaz, Director, Area of Economic & Social Planning. \*Ms. Lillian Torres Aguirre, 809-728-4430

## Rhode Island

Rhode Island Department of Administration, Office of Municipal Affairs, One Capitol Hill, 3rd Floor, **Providence**, 02908-5873. Mr. Daniel Varin, Chief. \*Mr. Paul M. Egan, Principal Research Technician, 401-277-6493

## South Carolina

Office of Demographic Statistics, Division of Research and Statistical Services, Rembert C. Dennis Building, 1000 Assembly Street, Room 442, **Columbia**, 29201. Mr. Michael V. Macfarlane, State Demographer. \*Ms. Diana Tester, 803-734-3782

## South Dakota

Center for Health Policy and Statistics, State Department of Health, 523 East Capitol, **Pierre**, 57501-3182. \*Mr. Dave Peterson, 605-773-3693

## Tennessee

Tennessee State Planning Office, 309 John Sevier State Office Building, 500 Charlotte Avenue, **Nashville**, 37243-0001. \*Mr. Charles Brown, 615-741-1676

## Texas

Department of Rural Sociology, Special Services Building, Room 138, Texas A & M University System, **College Station**, 77843-2125. \*Dr. Steve Murdock, 409-845-5332

## Utah

Demographic and Economic Analysis, Office of State Planning and Budget, 116 State Capitol Building, **Salt Lake City**, 84114. \*Mr. Brad Barber, 801-538-1027. Ms. Jeanine Taylor, 801-538-1546.

## Vermont

Center for Rural Studies, University of Vermont, 207 Morrill Hall. **Burlington**, 05405-0106. \*Mr. Kevin Wiberg, 802-656-3021

## Virginia

Center for Public Service, Dynamics Building, 4th Floor, 2015 Ivy Road, **Charlottesville**, 22903. Dr. Julie Martin. \*Ms. Jeanne C. Brown, 804-924-4440

## Washington

Forecasting Division, Office of Financial Management, Insurance Building, AQ44, Room 450, **Olympia**, 98504. \*Ms. Theresa J. Lowe, 206-586-2804

## West Virginia

Office of Health Services Research, Health Sciences Center (South), West Virginia University, **Morgantown**, 26506. \*Mr. Andrew Isserman, 304-293-2896

## Wisconsin

Bureau of Health Statistics, Division of Health, Wisconsin Department of Health and Social Services, Post Office Box 309, **Madison**, 53701-0309. \*Ms. Patricia Guhleman, 608-266-1920.

## Wyoming

Division of Economic Analysis, State Dept. of Administration and Information, 327E Emerson Building, **Cheyenne**, 82002-0060. \*Mr. Steve Furtney, 307-777-7221

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## FEDERAL DEPOSITORY LIBRARIES

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**Note**—Listed below are depository libraries of two kinds, sponsored by the Federal Government. The first kind belong to the U.S. Government Depository Library System. They do not necessarily choose to receive Census Bureau publications. The second

kind, marked with an asterisk (\*), belong to the Census Depository Library System. They receive at least some Census Bureau publications.

For any listing, we recommend that you **call ahead to learn if a library is likely to have the publications you need.** Holdings at the U.S. Census Bureau Library in Suitland, MD are complete; however, reference services are primarily for Census Bureau researchers. For more information about depository libraries, see chapter 7.

## Alabama

**Anniston**—\*Public Library of Anniston and Calhoun County

**Auburn**—Auburn University, Ralph Brown Draughon Library

**Birmingham**—Birmingham Public Library  
Birmingham Southern College Library

Jefferson State Community College,  
James B. Allen Library

Samford University Library

**Dothan**—\*George S. Houston Memorial Library

**Enterprise**—Enterprise State Junior College, Learning Resources Center

**Fayette**—Brewer State Junior College, Learning Resources Center Library

**Florence**—University of North Alabama, Collier Library

**Gadsden**—Gadsden Public Library

**Huntsville**—University of Alabama in Huntsville Library

**Jacksonville**—Jacksonville State University Library

**Mobile**—Mobile Public Library

Spring Hill College, Thomas Byrne Memorial Library

University of South Alabama Library

**Montevallo**—\*University of Montevallo, Carmichael Library

**Montgomery**—Alabama Public Library Service

Alabama Supreme Court and State Law Library

Auburn University at Montgomery Library (Regional Depository)

Maxwell Air Force Base Air University Library

**Normal**—Alabama Agricultural and Mechanical University, J. F. Drake Memorial Learning Resources Center

**Troy**—Troy State University Library

**Tuscaloosa**—University of Alabama: Amelia Gayle Gorgas Library (Regional Depository); School of Law Library; \*Business Library

**Tuskegee**—Tuskegee University, Hollis Burke Frissell Library

## Alaska

**Anchorage**—Anchorage Law Library  
Anchorage Municipal Libraries, Z. J. Lousac Public Library  
Supreme Court of Alaska Library  
University of Alaska at Anchorage Library  
U.S. Alaska Resources Library  
U.S. District Court Law Library

**Fairbanks**—University of Alaska, Elmer E. Rasmuson Library

**Juneau**—Alaska State Library  
University of Alaska Southeast-Juneau Library

**Ketchikan**—University of Alaska Southeast, Ketchikan College Library

## American Samoa

**Pago Pago**—American Samoa Community College, Learning Resources Center

## Arizona

**Coolidge**—Central Arizona College, Instructional Materials Center

**Flagstaff**—Northern Arizona University Library

**Glendale**—Glendale Public Library

**Holbrook**—Northland Pioneer College, Learning Resource Center

**Mesa**—Mesa Public Library

**Phoenix**—Department of Library Archives and Public Records (Regional Depository)  
Grand Canyon University, Fleming Library  
Phoenix Public Library  
U.S. Court of Appeals, Ninth Circuit Library

**Prescott**—Yavapai College Library

**Tempe**—Arizona State University: Hayden Library; College of Law Library

**Tucson**—Tucson Public Library  
University of Arizona Library  
University of Arizona College of Law Library

**Yuma**—Yuma County Library District

## Arkansas

**Arkadelphia**—Ouachita Baptist University, Riley Library

**Batesville**—Arkansas College Library

**Clarksville**—University of the Ozarks, Dobson Memorial Library

**Conway**—Hendrix College, Olin C. Bailey Library

**Fayetteville**—University of Arkansas: Mullins Library; School of Law Library

**Hot Springs**—\*Tri-Lakes Regional Library

**Jonesboro**—\*Crowley Ridge Regional Library

**Little Rock**—Arkansas State Library (Regional Depository)  
Arkansas Supreme Court Library  
Central Arkansas Library System  
University of Arkansas at Little Rock: Ottenheimer Library; Pulaski County Law Library

**Magnolia**—Southern Arkansas University, Magale Library

**Monticello**—University of Arkansas at Monticello Library

**Pine Bluff**—University of Arkansas at Pine Bluff, Watson Memorial Library

**Russellville**—Arkansas Technical University, Tomlinson Library

**Searcy**—Harding University, Rackett Memorial Library

**State University**—Arkansas State University, Dean B. Ellis Library

**Walnut Ridge**—Southern Baptist College, Felix Goodson Library

## California

**Anaheim**—Anaheim Public Library

**Arcadia**—Arcadia Public Library

**Arcata**—Humboldt State University Library

**Bakersfield**—California State University, Bakersfield Library  
Kern County, Beale Memorial Library

**Berkeley**—University of California: General Library; Boalt Law Library; \*Giannini Foundation Library

**Beverly Hills**—\*Beverly Hills Public Library

**Carson**—California State University, Dominguez Hills Library  
Carson Regional Library

**Chico**—California State University at Chico, Meriam Library

**Claremont**—Claremont Colleges, Honnold Library

**Compton**—Compton Public Library

**Culver City**—Culver City Public Library

**Davis**—University of California at Davis: Shields Library; Law Library

**Downey**—Downey City Library

**Fresno**—California State University Fresno, Henry Madden Library  
Fresno County Free Library

**Fullerton**—California State University at Fullerton Library

**Garden Grove**—Orange County Public Library

**Gardena**—County of Los Angeles Public Library, Gardena Library

**Glendale**—\*Glendale Public Library

**Hayward**—California State University, Hayward Library

**Huntington Park**—Huntington Park Library

**Inglewood**—Inglewood Public Library

**Irvine**—University of California at Irvine, Main Library

**La Jolla**—University of California, San Diego, Central University Library

**Lakewood**—Angelo Iacoboni Public Library

**Lancaster**—Lancaster Library

**La Verne**—University of La Verne, College of Law Library

**Long Beach**—California State University at Long Beach Library  
Long Beach Public Library

**Los Angeles**—California State University at Los Angeles, University Library  
Los Angeles County Law Library  
Los Angeles Public Library  
Loyola Law School, William M. Rains Library

Loyola Marymount University, Charles Von der Ahe Library  
Occidental College Library  
Southwestern University, School of Law Library  
University of California at Los Angeles: Research Library; Law Library  
University of Southern California: Doheny Memorial Library; Law Library  
U.S. Court of Appeals, Ninth Circuit Library  
Whittier College, School of Law Library

**Malibu**—Pepperdine University Library

**Menlo Park**—U. S. Geological Survey Library

**Montebello**—Montebello Regional Library

**Monterey**—U.S. Naval Postgraduate School, Dudley Knox Library

**Monterey Park**—Bruggemeyer Memorial Library

**Northridge**—California State University at Northridge, Oviatt Library

**Norwalk**—Norwalk Regional Library

**Oakland**—Mills College Library  
Oakland Public Library

**Ontario**—Ontario City Library

**Palm Springs**—Palm Springs Public Library

**Pasadena**—California Institute of Technology, Millikan Memorial Library  
Pasadena Public Library

**Pleasant Hill**—Contra Costa County Library

**Redding**—Shasta County Library

**Redlands**—University of Redlands, Armacost Library

**Redwood City**—Redwood City Public Library

**Reseda**—West Valley Regional Branch Library

**Richmond**—Richmond Public Library

**Riverside**—Riverside City and County Public Library  
University of California at Riverside Library

**Sacramento**—California State Library (Regional Depository)  
California State University at Sacramento Library  
Sacramento County Law Library  
Sacramento Public Library  
University of the Pacific, McGeorge School of Law Library

**San Bernardino**—San Bernardino County Library  
Don A. Turner County Law Library

**San Diego**—National University Law Library  
San Diego County Law Library  
San Diego County Library  
San Diego Public Library  
San Diego State University Library  
University of San Diego, Legal Research Center

**San Francisco**—Golden Gate University, School of Law Library  
San Francisco Public Library  
San Francisco State University, J. Paul Leonard Library  
Supreme Court of California Library  
U.S. Court of Appeals, Ninth Circuit Library  
University of California, Hastings College of Law, Legal Research Center  
University of San Francisco, Richard A. Gleeson Library

**San Jose**—San Jose State University Library  
**San Leandro**—San Leandro Community Library Center  
**San Luis Obispo**—California Polytechnic State University Library  
**San Mateo**—College of San Mateo Library  
**San Rafael**—Marin County Free Library  
**Santa Ana**—Orange County Law Library Santa Ana Public Library  
**Santa Barbara**—University of California at Santa Barbara Library  
**Santa Clara**—Santa Clara University, Orradre Library  
**Santa Cruz**—University of California at Santa Cruz, McHenry Library  
**Santa Monica**—\*Santa Monica Public Library  
**Santa Rosa**—Sonoma County Library  
**Stanford**—Stanford University: Jonsson Library; Robert Crown Law Library  
**Stockton**—Public Library of Stockton and San Joaquin County  
**Thousand Oaks**—California Lutheran University, Pearson Library  
**Torrance**—Torrance Public Library  
**Turlock**—California State University, Stanislaus Library  
**Valencia**—Valencia Regional Library  
**Vallejo**—Solano County Library, John F. Kennedy Library  
**Ventura**—Ventura County Library Services Agency  
**Visalia**—Tulare County Free Library  
**Walnut**—Mount San Antonio College Library  
**West Covina**—West Covina Regional Library  
**Whittier**—Whittier College, Wardman Library

### Canal Zone

**Balboa Heights**—Panama Canal Commission, Technical Resources Center

### Colorado

**Alamosa**—Adams State College  
**Aurora**—Aurora Public Library  
**Broomfield**—Mamie Doud Eisenhower Public Library  
**Boulder**—University of Colorado at Boulder, Norlin Library (Regional Depository) University of Colorado School of Law Library  
**Colorado Springs**—Colorado College, Tutt Library University of Colorado at Colorado Springs Library U.S. Air Force Academy Library  
**Denver**—Auraria Library Colorado Supreme Court Library Denver Public Library (Regional Depository) Department of the Interior, Bureau of Reclamation Library Regis College, Dayton Memorial Library U.S. Courts Library University of Denver: Penrose Library; College of Law Library  
**Fort Collins**—Colorado State University Libraries

**Golden**—Colorado School of Mines, Arthur Lakes Library  
**Grand Junction**—Mesa State College, Tomlinson Library Mesa County Public Library  
**Greeley**—University of Northern Colorado Library  
**Gunnison**—Western State College, Leslie J. Savage Library  
**La Junta**—Otero Junior College, Wheeler Library  
**Lakewood**—Jefferson County Public Library, Lakewood Library  
**Pueblo**—Pueblo Library District University of Southern Colorado Library

### Connecticut

**Bridgeport**—Bridgeport Public Library University of Bridgeport School of Law Library  
**Danbury**—Western Connecticut State University, Ruth A. Haas Library  
**Danielson**—Quinebaug Valley Community College Library  
**Enfield**—Enfield Central Library  
**Hartford**—Connecticut State Library (Regional Depository) Hartford Public Library Trinity College Library University of Connecticut, School of Law Library  
**Meridan**—\*Meridan Public Library  
**Middletown**—Wesleyan University, Olin Library  
**Mystic**—Mystic Seaport Museum, Incorporated, G. W. Blunt White Library  
**New Britain**—Central Connecticut State University, Elihu Burritt Library \*New Britain Public Library  
**New Haven**—\*New Haven Free Public Library Southern Connecticut State University, Hilton C. Buley Library Yale University: Seeley G. Mudd Library; Law Library  
**New London**—Connecticut College Library U.S. Coast Guard Academy Library  
**Stamford**—The Ferguson Library, Stamford's Public Library  
**Storrs**—University of Connecticut Library  
**Waterbury**—Post College, Traurig Library Silas Bronson Public Library  
**West Haven**—University of New Haven, Peterson Library

### Delaware

**Dover**—Delaware State College, William C. Jason Library  
**Georgetown**—Delaware Technical and Community College Library  
**Newark**—University of Delaware Library  
**Wilmington**—Widener University School of Law Library

### District of Columbia

**Washington**—Administrative Conference of the United States Library Advisory Commission on Intergovernmental Relations Library

American University, Washington College of Law Library  
 Catholic University of America, Robert J. White Law Library  
 Comptroller of the Currency Library  
 Department of the Army Library  
 Department of Commerce Library  
 Department of Education Research Library  
 Department of Health and Human Services Library  
 Department of Housing and Urban Development Library  
 Department of the Interior Library  
 Department of Justice Main Library  
 Department of Labor Library  
 Department of the Navy Library  
 Department of State: Library; Law Library  
 Department of Transportation: U.S. Coast Guard Law Library; Main Library  
 Department of the Treasury Library  
 District of Columbia Court of Appeals Library  
 District of Columbia Public Library  
 Equal Employment Opportunity Commission Library  
 Executive Office of the President, Library and Information Service Division  
 Federal Deposit Insurance Corporation Library  
 Federal Election Commission Law Library  
 Federal Energy Regulatory Commission Library  
 Federal Mine Safety and Health Review Commission Library  
 Federal Reserve System: Board of Governors Research Library; Law Library  
 \*Federal Trade Commission Library  
 General Accounting Office Library  
 General Services Administration Library  
 George Washington University: \*Gelman Library; Jacob Burns Law Library  
 Georgetown University: Library; Law Center, Edward Bennett Williams Library  
 Library of Congress: Congressional Research Service; Serial and Government Publications  
 Merit Systems Protection Board Library  
 National Defense University Library  
 Pension Benefit Guaranty Corporation, Legal Department Library  
 Pentagon Library  
 \*Population Reference Bureau  
 State Services Organization  
 U.S. Court of Appeals, Judges' Library and Federal Circuit Library  
 U.S. Information Agency Library  
 U.S. Office of Personnel Management Library  
 U.S. Postal Service Library  
 U.S. Senate Library  
 U.S. Supreme Court Library  
 Veterans' Administration, Central Office Library

### Florida

**Boca Raton**—Florida Atlantic University, S.E. Wimberly Library  
**Bradenton**—Manatee County Public Library

**Casselberry**—Seminole County Public Library  
**Clearwater**—Clearwater Public Library System  
**Coral Gables**—University of Miami Library  
**Daytona Beach**—Volusia County Library Center  
**De Land**—Stetson University, duPont-Ball Library  
**Fort Lauderdale**—Broward County Library Nova University Law Library  
**Fort Pierce**—Indian River Community College Library  
**Gainesville**—University of Florida: Libraries (Regional Depository); College of Law Library  
**Jacksonville**—Haydon Burns Public Library Jacksonville University, Swisher Library University of North Florida, Thomas G. Carpenter Library  
**Key West**—Florida Keys Community College Library  
 \*Monroe County Public Library  
**Lakeland**—Lakeland Public Library  
**Leesburg**—Lake-Sumter Community College Library  
**Melbourne**—Florida Institute of Technology Library  
**Miami**—Florida International University Library Miami-Dade Public Library St. Thomas University Library  
**North Miami**—Florida International University Library  
**Opa Locka**—Biscayne College Library  
**Orlando**—University of Central Florida Library  
**Palatka**—Saint Johns River Community College Library  
**Panama City**—Bay County Public Library  
**Pensacola**—University of West Florida, John C. Pace Library  
**Port Charlotte**—Charlotte-Glades County Library System  
**Saint Petersburg**—Saint Petersburg Public Library Stetson University College of Law, Charles A. Dana Library  
**Sarasota**—Selby Public Library  
**Tallahassee**—Florida Agricultural and Mechanical University, Coleman Memorial Library Florida State University: Law Library; Strozier Library Florida Supreme Court Library State Library of Florida  
**Tampa**—Tampa-Hillsborough County Public Library University of South Florida Library University of Tampa, Merl Kelce Library  
**Titusville**—\*North Brevard Public Library  
**Winter Park**—Rollins College, Olin Library

## Georgia

**Albany**—Dougherty County Public Library  
**Americus**—Georgia Southwestern College, James Earl Center Library

**Athens**—University of Georgia: Libraries (Regional Depository); School of Law Library  
**Atlanta**—Atlanta-Fulton Public Library Atlanta University Center, Robert W. Woodruff Library Emory University: Law School Library; Woodruff Library Georgia Institute of Technology, Price Gilbert Memorial Library Georgia State Law Library Georgia State University: William Russell Pullen Library; College of Law Library U.S. Court of Appeals, Eleventh Circuit Library  
**Augusta**—Augusta College, Reese Library Medical College of Georgia Library  
**Brunswick**—Brunswick-Glynn County Regional Library  
**Carrollton**—West Georgia College, Irvine Sullivan Ingram Library  
**Columbus**—Columbus College, Simon Schwob Memorial Library  
**Dahlonega**—North Georgia College, Stewart Library  
**Dalton**—Dalton College Library  
**Macon**—Mercer University: Main Library; Walter F. George School of Law Library  
**Marietta**—Kennesaw State College, Horace W. Sturgis Library  
**Milledgeville**—Georgia College, Ina Dillard Russell Library  
**Rome**—Berry College Memorial Library \*Hightower Regional Library  
**Savannah**—Chatham-Effingham Regional Library  
**Statesboro**—Georgia Southern University, Zach S. Henderson Library  
**Valdosta**—Valdosta State College Library

## Guam

**Agana**—Nieves M. Flores Memorial Library  
**Mangilao**—University of Guam, Robert F. Kennedy Memorial Library

## Hawaii

**Hilo**—University of Hawaii at Hilo, Edwin H. Mookini Library  
**Honolulu**—Hawaii Medical Library Incorporated Hawaii State Library Municipal Reference and Records Center Supreme Court Law Library University of Hawaii: Hamilton Library (Regional Depository); School of Law Library  
**Laie**—Brigham Young University (Hawaii Campus), Joseph F. Smith Library  
**Lihue**—Lihue Regional Library  
**Pearl City**—Leeward Community College Library  
**Wailuku**—Maui Public Library

## Idaho

**Boise**—Boise Public Library and Information Center Boise State University Library Idaho State Law Library Idaho State Library

**Caldwell**—College of Idaho  
**Idaho Falls**—\*Idaho Falls Public Library  
**Moscow**—University of Idaho: Library (Regional Depository); College of Law Library  
**Nampa**—Northwest Nazarene College, John E. Riley Library  
**Pocatello**—Idaho State University Library  
**Rexburg**—Ricks College, David O. McKay Library  
**Twin Falls**—College of Southern Idaho Library

## Illinois

**Aurora**—\*Aurora Public Library  
**Bloomington**—\*Bloomington Public Library Illinois Wesleyan University Libraries  
**Carbondale**—Southern Illinois University at Carbondale: Morris Library; School of Law Library  
**Carlinville**—Blackburn College, Lumpkin Library  
**Cartersville**—Shawnee Library System  
**Champaign**—University of Illinois, Law Library  
**Charleston**—Eastern Illinois University, Booth Library  
**Chicago**—Chicago Public Library Chicago State University DePaul University, Law Library Field Museum of Natural History Library Illinois Institute of Technology: Chicago-Kent College of Law Library; Paul V. Galvin Library John Marshall Law School Library Loyola University of Chicago: E. M. Cudahy Memorial Library; School of Law Library \*Municipal Reference Library Northeastern Illinois University Library Northwestern University, School of Law Library \*Roosevelt University Library University of Chicago: Library; Law Library University of Illinois at Chicago Library William J. Campbell Library of the U.S. Courts  
**Decatur**—Decatur Public Library  
**De Kalb**—Northern Illinois University, Founders' Memorial Library; College of Law Library  
**Des Plaines**—Oakton Community College, Government Information Center  
**East St. Louis**—\*East St. Louis Public Library  
**Edwardsville**—Southern Illinois University, Lovejoy Memorial Library  
**Elsah**—Principia College, Marshall Brooks Library  
**Evanston**—Northwestern University Library  
**Freeport**—Freeport Public Library  
**Galesburg**—Galesburg Public Library  
**Jacksonville**—MacMurray College, Henry Pfeiffer Library  
**Kankakee**—Olivet Nazarene University, Benner Library and Learning Resource Center  
**Lake Forest**—Lake Forest College, Donnelley Library

**Lebanon**—McKendree College, Holman Library  
**Lisle**—Illinois Benedictine College, Theodore F. Lownik Library  
**Macomb**—Western Illinois University Libraries  
**Moline**—Black Hawk College, Learning Resources Center  
**Monmouth**—Monmouth College, Hewes Library  
**Mount Carmel**—Wabash Valley College, Bauer Media Center  
**Mount Prospect**—Mount Prospect Public Library, Documents Department  
**Normal**—Illinois State University, Milner Library  
**Oak Park**—Oak Park Public Library  
**Oglesby**—Illinois Valley Community College, Jacobs Memorial Library  
**Palos Hills**—Moraine Valley Community College Library  
**Peoria**—Bradley University, Cullom-Davis Library  
 Peoria Public Library  
**Quincy**—\*Quincy Public Library  
**River Forest**—Rosary College, Rebecca Crown Library  
**Rockford**—Rockford Public Library  
**Romeoville**—Lewis University Library  
**South Holland**—South Suburban College, Learning Resources Center  
**Springfield**—Illinois State Library (Regional Depository)  
 \*Lincoln Library  
**Streamwood**—Poplar Creek Public Library  
**University Park**—Governors' State University Library  
**Urbana**—University of Illinois, Documents Library  
**Waukegan**—\*Waukegan Public Library  
**Wheaton**—Wheaton College Library  
**Woodstock**—Woodstock Public Library

## Indiana

**Anderson**—Anderson University Library  
 Anderson Public Library  
**Bloomington**—Indiana University: Library; Law Library  
**Columbus**—\*Bartholomew County Library  
**Crawfordsville**—Wabash College, Lilly Library  
**Evansville**—Evansville-Vanderburgh County Public Library  
 University of Southern Indiana Library  
**Fort Wayne**—Indiana University-Purdue University at Fort Wayne, Helmke Library  
 Allen County Public Library  
**Franklin**—Franklin College Library  
**Gary**—Gary Public Library  
 Indiana University, Northwest Library  
**Greencastle**—De Pauw University, Roy O. West Library  
**Hammond**—Hammond Public Library  
**Hanover**—Hanover College, Duggan Library  
**Huntington**—Huntington College, RichLyn Library  
**Indianapolis**—Butler University, Irwin Library  
 Indiana State Library (Regional Depository)  
 Indiana Supreme Court, Law Library

Indiana University-Purdue University Library  
 Indiana University, School of Law Library  
 Indianapolis-Marion County Public Library  
**Kokomo**—Indiana University at Kokomo, Learning Resource Center  
**Michigan City**—\*Michigan City Public Library  
**Muncie**—Ball State University Library  
 Muncie Public Library  
**New Albany**—Indiana University, Southeastern Campus Library  
**North Manchester**—\*Manchester College, Funderburg Library  
**Notre Dame**—University of Notre Dame: Kresge Law Library; Hesburgh Library  
**Rensselaer**—Saint Joseph's College Library  
**Richmond**—Earlham College, Lilly Library  
 Morrison-Reeves Library  
**South Bend**—Indiana University at South Bend Library  
**Terre Haute**—Indiana State University, Cunningham Memorial Library  
 \*Vigo County Public Library  
**Valparaiso**—Valparaiso University: Moelering Memorial Library; Law Library  
**West Lafayette**—Purdue University Libraries

## Iowa

**Ames**—Iowa State University Library  
**Cedar Falls**—University of Northern Iowa Library  
**Cedar Rapids**—Cedar Rapids Public Library  
**Council Bluffs**—Free Public Library  
 Iowa Western Community College, Herbert Hoover Library  
**Davenport**—Davenport Public Library  
**Des Moines**—Drake University: Cowles Library; Law Library  
 Public Library of Des Moines  
 State Library of Iowa  
**Dubuque**—Carnegie-Stout Public Library  
 Loras College, Wahlert Memorial Library  
**Fayette**—Upper Iowa University, Henderson-Wilder Library  
**Fort Dodge**—\*Fort Dodge Public Library  
**Grinnell**—Grinnell College Library  
**Iowa City**—University of Iowa College of Law, Law Library  
 University of Iowa Libraries (Regional Depository)  
**Lamoni**—Graceland College, Frederick Madison Smith Library  
**Mason City**—North Iowa Area Community College Library  
**Mount Vernon**—Cornell College, Russell D. Cole Library  
**Orange City**—Northwestern College, Ramaker Library  
**Ottumwa**—\*Ottumwa Public Library  
**Sioux City**—Sioux City Public Library

## Kansas

**Atchison**—Benedictine College Library  
**Baldwin City**—Baker University, Collins Library  
**Colby**—Colby Community College, H. F. Davis Memorial Library

**Dodge City**—Dodge City Community College  
**Emporia**—Emporia State University, William Allen White Library  
**Hays**—Fort Hays State University, Forsyth Library  
**Hutchinson**—Hutchinson Public Library  
**Lawrence**—University of Kansas: Law Library; Government Documents and Map Library (Regional Depository)  
**Leavenworth**—\*Public Library of Leavenworth  
**Manhattan**—Kansas State University, Farrell Library  
**Pittsburg**—Pittsburg State University, Leonard H. Axe Library  
**Salina**—Kansas Wesleyan University, Memorial Library  
**Shawnee Mission**—Johnson County Library  
**Topeka**—Kansas State Historical Society Library  
 Kansas State Library  
 Kansas Supreme Court Law Library  
 \*Topeka Public Library  
 Washburn University of Topeka, Law Library  
**Wichita**—Wichita State University, Ablah Library

## Kentucky

**Ashland**—University of Kentucky, Ashland Community College Library  
**Barbourville**—Union College, Abigail E. Weeks Memorial Library  
**Bowling Green**—Western Kentucky University, Helm-Cravens Library  
**Columbia**—Lindsey Wilson College, Katie Murrell Library  
**Crestview Hills**—Thomas More College Library  
**Danville**—Centre College, Grace Doherty Library  
**Frankfort**—Kentucky Department for Libraries and Archives  
 Kentucky State Law Library  
 Kentucky State University, Blazer Library  
**Hazard**—Hazard Community College Library  
**Highland Heights**—Northern Kentucky University, W. Frank Steely Library  
**Lexington**—University of Kentucky: Libraries (Regional Depository); Law Library  
**Louisville**—Louisville Free Public Library  
 University of Louisville: Ekstrom Library; Law Library  
**Morehead**—Morehead State University, Camden-Carroll Library  
**Murray**—Murray State University, Waterfield Library  
**Owensboro**—Kentucky Wesleyan College Library Learning Center  
**Paducah**—\*Paducah Public Library  
**Richmond**—Eastern Kentucky University, John Grant Crabbe Library  
**Williamsburg**—Cumberland College, Norma Perkins Hagan Memorial Library

## Louisiana

**Baton Rouge**—Louisiana State Library

Louisiana State University: Middleton Library (Regional Depository); Paul M. Hebert Law Center Library  
 Southern University: John B. Cade Library; Law School Library  
**Eunice**—Louisiana State University at Eunice, LeDoux Library  
**Hammond**—Southeastern Louisiana University, Sims Memorial Library  
**Houma**—\*Terrebonne Parish Library  
**Lafayette**—University of Southwestern Louisiana Library  
**Lake Charles**—McNeese State University, Lether E. Frazer Memorial Library  
**Leesville**—Vernon Parish Library  
**Monroe**—Northeast Louisiana University, Sandel Library  
**Natchitoches**—Northwestern State University, Watson Memorial Library  
**New Iberia**—\*Iberia Parish Library  
**New Orleans**—Law Library of Louisiana Loyola University: Library; Law Library  
 New Orleans Public Library  
 Our Lady of Holy Cross College Library  
 Southern University in New Orleans Library  
 Tulane University: Law Library; Howard-Tilton Memorial Library  
 U.S. Court of Appeals, Fifth Circuit Library  
 University of New Orleans, Earl K. Long Library  
 Xavier University Library  
**Pineville**—Louisiana College, Richard W. Norton Memorial Library  
**Ruston**—Louisiana Technical University, Prescott Memorial Library (Regional Depository)  
**Shreveport**—Louisiana State University at Shreveport Library  
 Shreve Memorial Library  
**Thibodaux**—Nicholls State University, Ellender Memorial Library

## Maine

**Augusta**—Maine Law and Legislative Reference Library  
 Maine State Library  
**Bangor**—Bangor Public Library  
**Biddeford**—\*McArthur Public Library  
**Brunswick**—Bowdoin College Library  
**Castine**—Maine Maritime Academy, Nutting Memorial Library  
**Lewiston**—Bates College, George and Helen Ladd Library  
**Orono**—University of Maine, Raymond H. Fogler Library (Regional Depository)  
**Portland**—Portland Public Library  
 University of Maine School of Law Library  
**Presque Isle**—University of Maine at Presque Isle, Library/ Learning Resources Center  
**Sanford**—Louis B. Goodall Memorial Library  
**Waterville**—Colby College, Miller Library

## Maryland

**Annapolis**—Maryland State Law Library  
 U.S. Naval Academy, Nimitz Library  
**Baltimore**—Enoch Pratt Free Library  
 Johns Hopkins University, Milton S. Eisenhower Library

Morgan State University, Soper Library  
 U.S. Court of Appeals, Fourth Circuit Library  
 University of Baltimore: Langsdale Library; Law Library  
 University of Maryland School of Law, Marshall Law Library  
**Bel Air**—Harford Community College Library  
**Beltsville**—Department of Agriculture, National Agricultural Library  
**Bethesda**—Department of Health and Human Services, National Library of Medicine  
 Uniformed Services University of Health Sciences, Learning Resource Center  
**Catonsville**—University of Maryland, Baltimore County, University Library  
**Chestertown**—Washington College, Clifton M. Miller Library  
**College Park**—University of Maryland, Hornbake Library (Regional Depository)  
**Cumberland**—Allegany Community College Library  
**Frostburg**—Frostburg State University Library  
**Hagerstown**—\*Government Reference Service  
**Patuxent River**—U.S. Naval Air Station Library  
**Rockville**—Montgomery County Department of Public Libraries  
**Salisbury**—Salisbury State College, Blackwell Library  
**Towson**—Goucher College, Julia Rogers Library  
 Towson State University, Cook Library  
**Westminster**—Western Maryland College, Hoover Library

## Massachusetts

**Amherst**—Amherst College Library  
 University of Massachusetts, University Library  
**Babson Park**—\*Babson College, Horn Library  
**Boston**—Boston Athenaeum Library  
 Boston Public Library (Regional Depository)  
 Boston University School of Law, Pappas Law Library  
 Northeastern University, Snell Library  
 State Library of Massachusetts  
 Suffolk University, Law Library  
 Supreme Judicial Court, Social Law Library  
 U.S. Court of Appeals, First Circuit Library  
**Brockton**—\*Brockton Public Library System  
**Brookline**—Public Library of Brookline  
**Cambridge**—Harvard University: Harvard College Library; Law School Library  
 Massachusetts Institute of Technology Libraries  
**Chestnut Hill**—Boston College, Thomas P. O'Neill  
**Chicopee**—College of Our Lady of the Elms, Alumnae Library  
**Fall River**—\*Fall River Public Library  
**Fitchburg**—\*Fitchburg Public Library  
**Gloucester**—\*Sawyer Free Library

**Lowell**—University of Lowell, O'Leary Library  
**Medford**—Tufts University Library  
**Milton**—Curry College, Levin Library  
**New Bedford**—New Bedford Free Public Library  
**Newton Centre**—Boston College Law Library  
**North Dartmouth**—Southeastern Massachusetts University Library  
**North Easton**—Stonehill College, Cushing-Martin Library  
**Northampton**—\*Smith College, William Alan Neilson Library  
**Pittsfield**—\*Berkshire Athenaeum, Pittsfield Public Library  
**Springfield**—Springfield City Library  
 Western New England College, Law Library  
**Waltham**—\*Bently College, Solomon R. Baker Library  
 Brandeis University Library  
 Waltham Public Library  
**Wellesley**—Wellesley College, Margaret Clapp Library  
**Wenham**—Gordon College, Jenks Learning Resource Center  
**Williamstown**—Williams College Library  
**Worcester**—American Antiquarian Society Library  
 \*Clark University, Robert Hutchings Goddard Library  
 University of Massachusetts Medical Center, Lamar Soutter Library  
 Worcester Public Library

## Michigan

**Albion**—Albion College, Stockwell-Mudd Library  
**Allendale**—Grand Valley State College, Zumberge Library  
**Alma**—Alma College Library  
**Alpena**—\*Northland Library Cooperative  
**Ann Arbor**—University of Michigan: Harlan Hatcher Library; Law Library  
**Battle Creek**—\*Willard Library  
**Bay City**—\*Bay City Library System  
**Benton Harbor**—Benton Harbor Public Library  
**Big Rapids**—\*Ferris State University, Timme Library  
**Bloomfield Hills**—Cranbrook Institute of Science Library  
**Dearborn**—Henry Ford Community College Library  
**Detroit**—Detroit College of Law Library  
 Detroit Public Library (Regional Depository)  
 Marygrove College Library  
 Mercy College of Detroit Library  
 University of Detroit: Library; School of Law Library  
 Wayne State University: Purdy/ Kresge Library; Arthur Neef Law Library  
**Dowagiac**—Southwestern Michigan College, Matthews Library  
**East Lansing**—Michigan State University Library

**Farmington Hills**—Oakland Community College, Martin L. King Learning Resources Center  
**Flint**—Flint Public Library  
 University of Michigan-Flint Library  
**Grand Rapids**—\*Margaret D. Sneed Library  
 Calvin College and Seminary Library  
 Grand Rapids Public Library  
**Holland**—\*Hope College, Van Wylen Library  
**Houghton**—Michigan Technological University Library  
**Jackson**—Jackson District Library  
**Kalamazoo**—Kalamazoo Public Library  
 Western Michigan University, Dwight B. Waldo Library  
**Lansing**—Michigan State Library (Regional Depository)  
 Thomas M. Cooley Law School Library  
**Livonia**—Livonia Public Library  
 Schoolcraft College Library  
**Madison Heights**—Madison Heights Public Library  
**Marquette**—Northern Michigan University, Olson Library  
**Monroe**—Monroe County Library System  
**Mount Clemens**—Macomb County Library  
**Mount Pleasant**—Central Michigan University Library  
**Muskegon**—Hackley Public Library  
**Petoskey**—North Central Michigan College Library  
**Port Huron**—Saint Clair County Library  
**Rochester**—Oakland University, Kresge Library  
**Royal Oak**—Royal Oak Public Library  
**Saginaw**—Hoyt Public Library  
**Sault Ste. Marie**—Lake Superior State University, Kenneth Shouldice Library  
**Traverse City**—Northwestern Michigan College, Mark and Helen Osterlin Library  
**University Center**—Delta College Library  
**Warren**—Warren Public Library, Arthur J. Miller Branch  
**Ypsilanti**—Eastern Michigan University Library

## Micronesia

**East Caroline Islands**—Community College of Micronesia Library

## Minnesota

**Austin**—\*Austin Public Library  
**Bemidji**—Bemidji State University, A. C. Clark Library  
**Blaine**—Blaine-Anoka County Library-Northtown Central Library  
**Collegeville**—Saint John's University, Alcuin Library  
**Cottage Grove**—Washington County Library, Park Grove Branch  
**Duluth**—Duluth Public Library  
 University of Minnesota  
**Eagan**—Dakota County Library, Wescott Branch  
**Edina**—Southdale-Hennepin Area Library  
**Hibbing**—\*Hibbing Public Library

**Mankato**—Mankato State University, Memorial Library  
**Marshall**—Southwest State University Library  
**Minneapolis**—Anoka County Library  
 Hennepin County Libraries  
 Minneapolis Public Library  
 University of Minnesota: Law School Library; Wilson Library (Regional Depository)  
**Moorhead**—Moorhead State University Library  
**Morris**—University of Minnesota, Morris, Rodney Briggs Library  
**Northfield**—Carleton College Library  
 Saint Olaf College, Rolvaag Memorial Library  
**Rochester**—\*Rochester Public Library  
**Saint Cloud**—\*Great River Regional Library  
 Saint Cloud State University, Learning Resources Center  
**Saint Paul**—\*College of St. Catherine Library  
 Hamline University, School of Law Library  
 \*James Jerome Hill Reference Library  
 Minnesota Historical Society Library  
 Minnesota State Law Library  
 \*Minnesota State Legislative Reference Library  
 Saint Paul Public Library  
 University of Minnesota, Saint Paul Campus Library  
 William Mitchell College of Law Library  
**Saint Peter**—Gustavus Adolphus College Library  
**Willmar**—Crow River Regional Library  
**Winona**—Winona State University, Maxwell Library

## Mississippi

**Cleveland**—Delta State University, W. B. Roberts Library  
**Columbus**—Mississippi University for Women, John Clayton Fant Memorial Library  
**Hattiesburg**—University of Southern Mississippi, Joseph A. Cook Memorial Library  
**Jackson**—Jackson State University, Henry Thomas Sampson Library  
 Millsaps College, Millsaps-Wilson Library  
 Mississippi College, School of Law Library  
 Mississippi Library Commission  
 Mississippi State Library  
**Lorman**—Alcorn State University Library  
**Mississippi State**—Mississippi State University, Mitchell Memorial Library  
**University**—University of Mississippi: J. D. Williams Library (Regional Depository); Law Library

## Missouri

**Cape Girardeau**—Southeast Missouri State University, Kent Library  
**Columbia**—University of Missouri at Columbia: Ellis Library (Regional Depository); Law Library  
**Fulton**—Westminster College, Reeves Library

**Hillsboro**—Jefferson College Library  
**Jefferson City**—Lincoln University, Inman E. Page Library  
 Missouri State Library  
 Missouri Supreme Court Library  
**Joplin**—Missouri Southern State College Library  
**Kansas City**—Kansas City Missouri Public Library  
 Rockhurst College, Greenlease Library  
 University of Missouri at Kansas City: General Library; Leon E. Bloch Law Library  
**Kirksville**—Northeast Missouri State University, Pickler Memorial Library  
**Liberty**—William Jewell College, Charles F. Curry Library  
**Maryville**—Northwest Missouri State University: B. D. Owens Library; \*Wells Learning Resources Center  
**Rolla**—University of Missouri-Rolla, Curtis Laws Wilson Library  
**Saint Charles**—Lindenwood Colleges, Margaret Leggat Butler Library  
 Kisker Road Branch, Saint Charles City-County Library District  
**Saint Joseph**—River Bluffs Regional Library  
**Saint Louis**—Maryville College Library  
 Saint Louis County Library  
 Saint Louis Public Library  
 Saint Louis University: Law Library; Pius XII Memorial Library  
 U.S. Court of Appeals, Eighth Circuit Library  
 University of Missouri at Saint Louis, Thomas Jefferson Library  
 Washington University: Law Library; John M. Olin Library  
**Springfield**—Drury College, Walker Library  
 Southwest Missouri State University Library  
**Warrensburg**—Central Missouri State University, Ward Edwards Library

## Montana

**Billings**—Eastern Montana College Library  
 \*Parnly Billings Library  
**Bozeman**—Montana State University, The Libraries  
**Butte**—Montana College of Mineral Science and Technology Library  
**Great Falls**—\*Great Falls Public Library  
**Havre**—Northern Montana College Library  
**Helena**—Carroll College, Corette Library  
 Montana State Library  
 State Law Library of Montana  
**Missoula**—University of Montana, Maureen and Mike Mansfield Library (Regional Depository)

## Nebraska

**Blair**—Dana College, Dana-LIFE Library  
**Crete**—Doane College, Perkins Library  
**Fremont**—Midland Lutheran College, Luther Library  
**Kearney**—Kearney State College, Calvin T. Ryan Library  
**Lincoln**—Nebraska Library Commission  
 Nebraska State Library  
 \*Nebraska Wesleyan University Library  
 \*Union College Library  
 University of Nebraska-Lincoln: College of Law Library; D. L. Love Memorial Library (Regional Depository)

**Omaha**—Creighton University: Law Library; Reinert/ Alumni Memorial Library  
Omaha Public Library, W. Dale Clark Library  
University of Nebraska at Omaha, University Library  
**Scottsbluff**—Scottsbluff Public Library  
**Wayne**—Wayne State College, U.S. Conn Library

## Nevada

**Carson City**—Nevada State Library and Archives  
Nevada Supreme Court Library  
**Las Vegas**—Clark County Law Library  
Las Vegas-Clark County Library  
University of Nevada at Las Vegas, James Dickinson Library  
**Reno**—National Judicial College, Law Library  
Nevada Historical Society Library  
University of Nevada Library (Regional Depository)  
Washoe County Library

## New Hampshire

**Concord**—Franklin Pierce Law Center Library  
New Hampshire State Library  
**Durham**—University of New Hampshire Library  
**Hanover**—Dartmouth College Library  
**Henniker**—New England College, Danforth Library  
**Manchester**—Manchester City Library  
New Hampshire College, H. A. B. Shapiro Memorial Library  
Saint Anselm's College, Geisel Library  
**Nashua**—Nashua Public Library

## New Jersey

**Bayonne**—Bayonne Free Public Library  
**Bloomfield**—Bloomfield Public Library  
**Bridgeton**—Cumberland County Library  
**Camden**—Rutgers University: Camden Library; School of Law Library  
**Convent Station**—College of Saint Elizabeth, Mahoney Library  
**East Brunswick**—East Brunswick Public Library  
**East Orange**—East Orange Public Library  
**Elizabeth**—Free Public Library of Elizabeth  
**Glassboro**—Glassboro State College, Savitz Library  
**Hackensack**—Johnson Free Public Library  
**Irvington**—Irvington Public Library  
**Jersey City**—Jersey City Public Library  
Jersey City State College, Forrest A. Irwin Library  
**Kearny**—\*Kearny Public Library  
**Lawrenceville**—Rider College, Franklin F. Moore Library  
**Madison**—Drew University Library  
**Mahwah**—Ramapo College Library  
**Morristown**—\*Joint Free Public Library of Morristown and Morris Township  
**Mount Holly**—Burlington County Library

**New Brunswick**—Rutgers University, Alexander Library  
**Newark**—Newark Public Library (Regional Depository)  
Rutgers University: John Cotton Dana Library; Justice Henry E. Ackerson Law Library  
Seton Hall University, Law Library  
**Newton**—Sussex County Library  
**Orange**—\*Orange Public Library  
**Paterson**—\*Paterson Free Public Library  
**Perth Amboy**—\*Perth Amboy Public Library  
**Phillipsburg**—Phillipsburg Free Public Library  
**Plainfield**—Plainfield Public Library  
**Pomona**—Stockton State College Library  
**Princeton**—Princeton University Library  
**Randolph**—County College of Morris, Sherman H. Masten Learning Resource Center  
**Rutherford**—Fairleigh Dickinson University, Messler Library  
**Shrewsbury**—Monmouth County Library, Eastern Branch  
**South Orange**—Seton Hall University, Documents Library  
**Teaneck**—Fairleigh Dickinson University, Weiner Library  
**Toms River**—Ocean County College, Learning Resources Center  
**Trenton**—New Jersey State Library  
Trenton Free Public Library  
**Union**—Kean College of New Jersey, Nancy Thompson Library  
**Upper Montclair**—Montclair State College, Harry H. Sprague Library  
**Vineland**—\*Vineland Public Library  
**Wayne**—Wayne Public Library  
**West Long Beach**—Monmouth College, Guggenheim Memorial Library  
**Woodbridge**—Woodbridge Public Library

## New Mexico

**Albuquerque**—University of New Mexico: Medical Center Library; School of Law Library; General Library (Regional Depository)  
**Hobbs**—New Mexico Junior College, Pannell Library  
**Las Cruces**—New Mexico State University Library  
**Las Vegas**—New Mexico Highlands University, Donnelly Library  
**Portales**—Eastern New Mexico University, Golden Library  
**Roswell**—\*Roswell Public Library  
**Santa Fe**—New Mexico State Library (Regional Depository)  
New Mexico Supreme Court Law Library  
**Silver City**—Western New Mexico University, Miller Library  
**Socorro**—New Mexico Institute of Mining and Technology, Martin Speare Memorial Library

## New York

**Albany**—Albany Law School Library  
New York State Court of Appeals Library

New York State Library (Regional Depository)  
State University of New York at Albany, University Library  
**Annandale on Hudson**—\*Bard College Library  
**Auburn**—Seymour Library  
**Aurora**—\*Wells College Library  
**Bellport**—East Islip Public Library  
**Binghamton**—State University of New York at Binghamton, Glenn G. Bartle Library  
**Brockport**—State University of New York at Brockport, Drake Memorial Library  
**Bronx**—Fordham University Library  
Herbert H. Lehman College Library  
New York Public Library, Hunt's Point Regional Branch  
State University of New York, Maritime College, Stephen B. Luce Library  
**Bronxville**—Sarah Lawrence College, Esther Raushenbush Library  
**Brooklyn**—Brooklyn College: Library; Law School Library  
Brooklyn Public Library: Business Library; Social Science-Documents  
Pratt Institute Library  
State University of New York, Health Center at Brooklyn Library  
**Buffalo**—Buffalo and Erie County Public Library  
State University of New York at Buffalo: Charles B. Sears Law Library; Lockwood Memorial Library  
**Canton**—Saint Lawrence University, Owen D. Young Library  
**Clinton**—\*Hamilton College, Burke Library  
**Corning**—Corning Community College, Arthur A. Houghton Jr. Library  
**Cortland**—State University of New York at Cortland, Memorial Library  
**Delhi**—State University of New York, College of Technology, Resnick Library  
**Elmira**—Elmira College, Gannett Tripp Learning Center  
**Farmingdale**—State University of New York at Farmingdale Library  
**Flushing**—Queens College, Benjamin S. Rosenthal Library  
CUNY Law School at Queens College, CUNY Law Library  
**Garden City**—Adelphi University, Swirbul Library  
**Geneseo**—State University of New York at Geneseo, Milne Library  
**Greenvale**—Long Island University, B. Davis Schwartz Memorial Library  
**Hamilton**—Colgate University, Everett Needham Case Library  
**Hempstead**—Hofstra University: Library; School of Law Library  
**Huntington**—Touro College Law Center Library  
**Ithaca**—Cornell University: Library; Law Library; Albert R. Mann Library  
**Jamaica**—Queens Borough Public Library  
Saint John's University: Library; School of Law Library  
**Jamestown**—\*James Predergast Library  
**Kings Point**—U.S. Merchant Marine Academy Library  
**Kingston**—\*Kingston Area Library

**Long Island City**—Fiorello H. LaGuardia Community College Library  
**Middletown**—Thrall Library  
**Mount Vernon**—Mount Vernon Public Library  
**New Paltz**—State University College at New Paltz, Sojourner Truth Library  
**New York City**—Cordoza Law School Library  
 City University of New York, City College Library  
 College of Insurance Library  
 Columbia University: Libraries; School of Law Library  
 Cooper Union for the Advancement of Science and Arts Library  
 Fordham Law School Library  
 Medical Library Center of New York  
 New York Law Institute Library  
 New York Law School Library  
 New York Public Library: Astor Branch; Lenox Branch  
 New York University: Law Library; Elmer Holmes Bobst Library  
 U.S. Court of Appeals, Second Circuit Library  
 Yeshiva University: Chutick Law Library; Pollack Library  
**Newburgh**—Newburgh Free Library  
**Niagara Falls**—Niagara Falls Public Library  
**Oakdale**—Dowling College Library  
**Oneonta**—State University College at Oneonta, James M. Milne Library  
**Oswego**—State University College at Oswego, Penfield Library  
**Plattsburgh**—State University College at Plattsburgh, Benjamin F. Feinberg Library  
**Potsdam**—Clarkson University, Harriet Call Burnap Memorial Library  
 State University of New York at Potsdam, Frederick W. Crumb Memorial Library  
**Poughkeepsie**—Vassar College Library  
**Purchase**—State University of New York at Purchase Library  
**Rochester**—Rochester Public Library  
 University of Rochester, Rush Rhees Library  
**Saint Bonaventure**—Saint Bonaventure University, Friedsam Memorial Library  
**Saratoga Springs**—Skidmore College Library  
**Schenectady**—Union College, Schaffer Library  
**Southampton**—Long Island University Library  
**Sparkill**—St. Thomas Aquinas College, Loughheed Library  
**Staten Island**—Wagner College, Horrmann Library  
**Stony Brook**—State University of New York at Stony Brook, Main Library  
**Syracuse**—Onondaga County Public Library  
 Syracuse University: Library; H. Douglas Barclay Law Library  
**Troy**—\*Rensselaer Polytechnic Institute Library  
 Troy Public Library  
**Uniondale**—Nassau Library System  
**Utica**—Utica Public Library

SUNY Institute of Technology Library  
**Watertown**—\*Flower Memorial Library  
**West Point**—U.S. Military Academy Library  
**White Plains**—Pace University, Law Library  
 \*White Plains Public Library  
**Yonkers**—Yonkers Public Library, Getty Square Branch  
**Yorktown Heights**—Mercy College Library

## North Carolina

**Asheville**—University of North Carolina, D. Hiden Ramsey Library  
**Boiling Springs**—Gardner-Webb College, Dover Memorial Library  
**Boone**—Appalachian State University Library  
**Buies Creek**—Campbell University, Carrie Rich Memorial Library  
**Burlington**—\*Central North Carolina Regional Library  
**Chapel Hill**—University of North Carolina at Chapel Hill: Davis Library (Regional Depository); Law Library  
**Charlotte**—\*Johnson C. Smith University, James B. Duke Memorial Library  
 Public Library of Charlotte and Mecklenburg County  
 Queens College, Everett Library  
 University of North Carolina at Charlotte, Atkins Library  
**Cullowhee**—Western Carolina University, Hunter Library  
**Davidson**—Davidson College Library  
**Durham**—Duke University: School of Law Library; William R. Perkins Library  
 North Carolina Central University: Law Library; James E. Shepard Memorial Library  
**Elon College**—Elon College, Iris Holt McEwen Library  
**Fayetteville**—Fayetteville State University, Charles W. Chesnutt Library  
**Gastonia**—\*Gaston County Public Library  
**Greensboro**—North Carolina Agricultural and Technical State University, F. D. Bluford Library  
 University of North Carolina at Greensboro, Walter Clinton Jackson Library  
**Greenville**—East Carolina University, J. Y. Joyner Library  
**Laurinburg**—Saint Andrews Presbyterian College, DeTamble Library  
**Lexington**—Davidson County Public Library  
**Mount Olive**—Mount Olive College, Moyer Library  
**Newton**—\*Catawba County Library  
**Pembroke**—Pembroke State University, Mary H. Livermore Library  
**Raleigh**—Department of Cultural Resources, Division of State Library  
 North Carolina State University, D. H. Hill Library  
 North Carolina Supreme Court Library  
**Rocky Mount**—North Carolina Wesleyan College Library  
**Salisbury**—Catawba College Library  
**Wilmington**—University of North Carolina at Wilmington, William M. Randall Library  
**Wilson**—Barton College, Hackney Library

**Winston-Salem**—Forsyth County Public Library  
 Wake Forest University, Z. Smith Reynolds Library; School of Law Library

## North Dakota

**Bismarck**—North Dakota State Library  
 North Dakota Supreme Court Law Library  
 State Historical Society of North Dakota, Research Library  
 Veterans' Memorial Public Library  
**Dickinson**—Dickinson State University, Stoxen Library  
**Fargo**—Fargo Public Library  
 North Dakota State University Library (Regional Depository)  
**Grand Forks**—University of North Dakota, Chester Fritz Library  
**Minot**—Minot State University, Memorial Library  
**Valley City**—Valley City State University Library

## Ohio

**Ada**—Ohio Northern University, J. P. Taggart Law Library  
**Akron**—Akron-Summit County Public Library  
 University of Akron: Bierce Library; School of Law Library  
**Alliance**—Mount Union College Library  
**Ashland**—Ashland University Library  
**Athens**—Ohio University Library  
**Bluffton**—Bluffton College, Musselman Library  
**Bowling Green**—Bowling Green State University Library  
**Canton**—Malone College, Everett L. Cattell Library  
**Chardon**—Geauga County Public Library  
**Cincinnati**—Public Library of Cincinnati and Hamilton County  
 U.S. Court of Appeals, Sixth Circuit Library  
 University of Cincinnati: Langsam Library; Marx Law Library  
**Cleveland**—Case Western Reserve University: Freiburger Library; School of Law Library  
 Cleveland Heights-University Heights Public Library  
 Cleveland Public Library  
 Cleveland State University: Library;  
 Cleveland-Marshall College of Law, Joseph W. Bartunek III Law Library  
 Municipal Reference Library  
**Cleveland Heights**—University Heights Public Library  
**Columbus**—Capital University: Library; Law School Library  
 Columbus Metropolitan Library  
 Ohio State University: Libraries; College of Law Libraries  
 Ohio Supreme Court Law Library  
 State Library of Ohio (Regional Depository)  
**Dayton**—Dayton and Montgomery County Public Library  
 University of Dayton, Roesch Library  
 Wright State University Library  
**Delaware**—Ohio Wesleyan University, L. A. Beeghly Library

**Elyria**—Elyria Public Library  
**Findlay**—University of Findlay, Shafer Library  
**Gambier**—Kenyon College Library  
**Granville**—Denison University Libraries, William H. Doane Library  
**Hiram**—Hiram College, Teachout-Price Memorial Library  
**Kent**—Kent State University Libraries  
**Lima**—\*Lima Public Library  
**Lorain**—\*Lorain Public Library  
**Mansfield**—\*Mansfield-Richland County Public Library  
**Marietta**—Marietta College, Dawes Memorial Library  
**Marion**—\*Marion Public Library  
**Massillon**—\*Massillon Public Library  
**Mentor**—\*Lakeland Community College Library  
**Middletown**—Miami University at Middletown, Gardner-Harvey Library  
**New Concord**—Muskingum College Library  
**Newark**—\*Newark Public Library  
**Oberlin**—Oberlin College Library  
**Oxford**—Miami University at Oxford, King Library  
**Portsmouth**—Shawnee State University Library  
**Rio Grande**—University of Rio Grande, Jeanette Albiez Davis Library  
**Springfield**—Clark County Public Library  
**Steubenville**—College of Steubenville, Starvaggi Memorial Library  
 Public Library of Steubenville and Jefferson County  
**Tiffin**—Heidelberg College, Beeghly Library  
**Toledo**—Toledo-Lucas County Public Library  
 University of Toledo: Library; College of Law Library  
**University Heights**—John Carroll University, Grasselli Library  
**Westerville**—Otterbein College, Courtright Memorial Library  
**Wilmington**—Wilmington College, Watson Library  
**Wooster**—College of Wooster, Andrews Library  
**Worthington**—Worthington Public Library  
**Youngstown**—Public Library of Youngstown and Mahoning County  
 Youngstown State University, William F. Maag Library

## Northern Marianas

**Saipan**—Northern Marianas College, Olympio T. Borja Memorial Library

## Oklahoma

**Ada**—East Central Oklahoma State University, Linscheid Library  
**Alva**—Northwestern Oklahoma State University Library  
**Bethany**—Bethany Nazarene University, R. T. Williams Library  
**Durant**—Southeastern Oklahoma State University Library  
**Edmond**—Central State University Library

**Enid**—Public Library of Enid and Garfield County  
**Langston**—Langston University, G. Lamar Harrison Library  
**Lawton**—\*Lawton Public Library  
**Norman**—University of Oklahoma: Bizzell Memorial Library; Law Library  
**Oklahoma City**—Metropolitan Library System  
 Oklahoma City University Library  
 Oklahoma Department of Libraries (Regional Depository)  
**Shawnee**—Oklahoma Baptist University Library  
**Stillwater**—Oklahoma State University Library (Regional Depository)  
**Tahlequah**—Northeastern Oklahoma State University, John Vaughan Library  
**Tulsa**—Tulsa City-County Library System  
 University of Tulsa: College of Law Library; McFarlin Library  
**Weatherford**—Southwestern Oklahoma State University, Al Harris Library

## Oregon

**Ashland**—Southern Oregon State College Library  
**Bend**—Central Oregon Community College Library  
**Corvallis**—Oregon State University Library  
**Eugene**—University of Oregon: Library; Law Library  
**Forest Grove**—Pacific University, Harvey W. Scott Library  
**Klamath Falls**—Oregon Institute of Technology Library  
**La Grande**—Eastern Oregon College, Walter M. Pierce Library  
**McMinnville**—Linfield College, Northup Library  
**Medford**—\*Jackson County Library System  
**Monmouth**—Western Oregon State College Library  
**Pendleton**—Blue Mountain Community College Library  
**Portland**—Lewis and Clark College, Aubrey R. Watzek Library  
 Multnomah County Library  
 Northwestern School of Law, Paul L. Boley Law Library  
 Portland State University, Millar Library (Regional Depository)  
 Reed College Library  
 U.S. Department of Energy, Bonneville Power Administration Library  
**Salem**—Oregon State Library, State Library Building  
 Oregon Supreme Court Law Library  
 Willamette University: College of Law Library; Main Library

## Pennsylvania

**Aliquippa**—\*B. F. Jones Memorial Library  
**Allentown**—\*Allentown Public Library  
 Muhlenberg College, Trexler Library  
**Altoona**—Altoona Area Public Library  
**Bethel Park**—Bethel Park Public Library

**Bethlehem**—Lehigh University Libraries, Linderman Library  
**Bloomsburg**—\*Bloomsburg Public Library  
**Blue Bell**—Montgomery County Community College, Learning Resources Center  
**Bradford**—University of Pittsburgh at Bradford, T. Edward and Tullah Hanley Library  
**Broomall**—Marple Public Library  
**California**—California University of Pennsylvania, Louis L. Manderino Library  
**Carlisle**—Dickinson College, Boyd Lee Spahr Library  
 Dickinson School of Law, Sheeley-Lee Law Library  
**Cheyney**—Cheyney State College, Leslie Pinckney Hill Library  
**Collegeville**—Ursinus College, Myrin Library  
**Coraopolis**—Robert Morris College Library  
**Doylestown**—Bucks County Free Library, Center County Branch  
**East Stroudsburg**—East Stroudsburg University, Kemp Library  
**Easton**—\*Easton Area Public Library  
**Erie**—Erie County Library System  
**Greenville**—Thiel College, Langenheim Memorial Library  
**Harrisburg**—\*Harrisburg Commerce Department, Bureau of Research and Planning  
 State Library of Pennsylvania (Regional Depository)  
 Widener University, School of Law Library  
**Haverford**—Haverford College, Magill Library  
**Hazleton**—Hazleton Area Public Library  
**Indiana**—Indiana University of Pennsylvania, Stapleton Library  
**Johnstown**—Cambria County Library System, Glosser Memorial Library  
**Lancaster**—Franklin and Marshall College, Shadek-Fackenthal Library  
**Lewisburg**—Bucknell University, Ellen Clarke Bertrand Library  
**Lincoln University**—\*Lincoln University, Langston Hughes Memorial Library  
**Mansfield**—Mansfield University Library  
**Meadville**—Allegheny College, Lawrence Lee Pelletier Library  
**Millersville**—Millersville University, Helen A. Ganser Library  
**Monaca**—\*Beaver County Community College  
**Monessen**—Monessen Public Library  
**New Castle**—New Castle Public Library  
**New Wilmington**—\*Westminster College, McGill Library  
**Newton**—Bucks County Community College Library  
**Norristown**—Montgomery County-Norristown Public Library  
**Philadelphia**—Drexel University, Hagerty Library  
 Free Library of Philadelphia  
 Saint Joseph's University, Drexel Library  
 Temple University: Paley Library; Law Library  
 U.S. Court of Appeals, Third Circuit Library  
 University of Pennsylvania: Library; Biddle Law Library

**Pittsburgh**—Allegheny County Law Library  
Carnegie Library of Pittsburgh: Allegheny Regional Branch; Government Documents Department  
Duquesne University Law Library  
La Roche College, John J. Wright Library  
U.S. Bureau of Mines Library  
University of Pittsburgh: Hillman Library; Law Library

**Pottsville**—Pottsville Free Public Library

**Reading**—Reading Public Library

**Scranton**—Scranton Public Library

**Shippensburg**—Shippensburg University, Ezra Lehman Memorial Library

**Slippery Rock**—Slippery Rock University, Bailey Library

**Swarthmore**—Swarthmore College, McCabe Library

**University Park**—Pennsylvania State University Libraries

**Villanova**—Villanova University Law School, Pulling Law Library

**Warren**—Warren Library Association, Warren Public Library

**West Chester**—West Chester University, Francis Harvey Green Library

**Wilkes-Barre**—King's College, D. Leonard Corgan Library  
\*Osterhout Free Library

**Williamsport**—Lycoming College Library

**York**—\*Martin Memorial Library  
York College of Pennsylvania, Schmidt Library

**Youngwood**—Westmoreland County Community College, Learning Resources Center

## Puerto Rico

**Mayaguez**—University of Puerto Rico, Mayaguez Campus Library

**Ponce**—Catholic University of Puerto Rico: Encarnacion Valdes Library; School of Law Library

**Rio Piedras**—University of Puerto Rico, J. M. Lazaro Library

## Rhode Island

**Barrington**—Barrington Public Library

**Kingston**—University of Rhode Island Library

**Newport**—U.S. Naval War College Library

**Providence**—Brown University, John D. Rockefeller, Jr. Library  
Providence College, Phillips Memorial Library  
Providence Public Library  
Rhode Island College, James P. Adams Library  
Rhode Island State Law Library  
Rhode Island State Library

**Warwick**—Warwick Public Library

**Westerly**—Westerly Public Library

**Woonsocket**—Woonsocket Harris Public Library

## South Carolina

**Aiken**—University of South Carolina at Aiken, Gregg-Graniteville Library

**Anderson**—\*Anderson County Library

**Charleston**—Baptist College at Charleston, L. Mendel Rivers Library  
The Citadel, Daniel Library  
College of Charleston, Robert Scott Small Library

**Clemson**—Clemson University Library (Regional Depository)

**Columbia**—Benedict College, Payton Learning Resources Center  
South Carolina State Library  
University of South Carolina: Thomas Cooper Library; Coleman Karesh Law Library

**Conway**—University of South Carolina, Coastal Carolina College, Kimbel Library

**Due West**—Erskine College, McCain Library

**Florence**—Florence County Library  
Francis Marion College, James A. Rogers Library

**Greenville**—Furman University Library  
Greenville County Library

**Greenwood**—Lander College, Jackson Library

**Lancaster**—University of South Carolina at Lancaster, Medford Library

**Orangeburg**—\*Orangeburg County Library  
South Carolina State College, Miller F. Whittaker Library

**Rock Hill**—Winthrop College, Dacus Library

**Spartanburg**—Spartanburg County Public Library

## South Dakota

**Aberdeen**—Northern State College Library

**Brookings**—South Dakota State University, H. M. Briggs Library

**Pierre**—South Dakota State Library  
South Dakota Supreme Court Library

**Rapid City**—Rapid City Public Library  
South Dakota School of Mines and Technology, Devereaux Library

**Sioux Falls**—Augustana College, Mikkelsen Library  
Sioux Falls Public Library

**Spearfish**—Black Hills State University, E. Y. Berry Library

**Vermillion**—University of South Dakota, I. D. Weeks Library

## Tennessee

**Bristol**—King College, E. W. King Library

**Chattanooga**—Chattanooga-Hamilton County, Bicentennial Library  
U.S. Tennessee Valley Authority, Technical Library

**Clarksville**—Austin Peay State University, Felix G. Woodward Library

**Cleveland**—Cleveland State Community College Library

**Columbia**—Columbia State Community College, John W. Finney Memorial Library

**Cookeville**—Tennessee Technological University

**Jackson**—Lambuth College, Luther L. Gobbel Library

**Jefferson City**—Carson-Newman College Library

**Johnson City**—East Tennessee State University, Sherrod Library

**Kingsport**—\*Kingsport Public Library, J. Fred Johnson Memorial Library

**Knoxville**—Public Libraries of Knoxville-Knox County, Lawson McGhee Library  
University of Tennessee at Knoxville: John C. Hodges Library; Law Library

**Martin**—University of Tennessee at Martin, Paul Meek Library

**Memphis**—Memphis-Shelby County Public Library and Information Center  
Memphis State University: Cecil C. Humphreys School of Law Library; Libraries (Regional Depository)

**Murfreesboro**—Middle Tennessee State University, Todd Library

**Nashville**—Fisk University Library  
Public Library of Nashville and Davidson County  
Tennessee State Library and Archives  
Tennessee State University, Brown-Daniel Library  
Vanderbilt University: Library; Law Library

**Sewanee**—University of the South, Jessie Ball duPont Library

## Texas

**Abilene**—Abilene Christian University, Margaret and Herman Brown Library  
Hardin-Simmons University, Rupert and Pauline Richardson Library

**Arlington**—Arlington Public Library  
University of Texas at Arlington Library

**Austin**—Texas State Law Library  
Texas State Library (Regional Depository)  
University of Texas at Austin: Perry-Castaneda Library; Public Affairs Library; Tarlton Law Library

**Baytown**—Lee College Library

**Beaumont**—Lamar University, Mary and John Gray Library

**Brownwood**—Howard Payne University, Walker Memorial Library

**Canyon**—West Texas State University, Cornette Library

**College Station**—Texas A & M University, Sterling C. Evans Library

**Commerce**—East Texas State University, James Gilliam Gee Library

**Corpus Christi**—Corpus Christi State University Library  
\*Corpus Christi Public Library

**Corsicana**—Navarro College, Learning Resources Center

**Dallas**—Dallas Baptist University, Vance Memorial Library  
Dallas Public Library  
Southern Methodist University, Fondren Library  
University of Texas, Southwestern Medical Center Library

**Denton**—North Texas State University Library

**Edinburg**—University of Texas, Pan American Library

**El Paso**—El Paso Public Library  
University of Texas at El Paso, Documents and Maps Library

**Fort Worth**—Fort Worth Public Library  
Texas Christian University, Mary Coats  
Burnett Library

**Garland**—Nicholson Memorial Library  
System

**Galveston**—Rosenberg Library

**Houston**—Houston Public Library  
North Harris County College, Learning  
Resource Center  
Rice University, Fondren Library  
South Texas College of Law Library  
Texas Southern University Law Library  
University of Houston at Clear Lake, Neu-  
mann Library  
University of Houston: School of Law  
Library; M. D. Anderson Library

**Huntsville**—Sam Houston State University  
Library

**Irving**—Irving Public Library System

**Kingsville**—Texas Arts and Industries  
University, Jernigan Library

**Laredo**—Laredo Junior College, Harold R.  
Yeary Library

**Longview**—Longview Public Library

**Lubbock**—Texas Tech University: Library  
(Regional Depository); School of Law  
Library

**Nacogdoches**—Stephen F. Austin State  
University, Steen Library

**Odessa**—\* Ector County Library

**Richardson**—University of Texas at Dallas  
Library

**San Angelo**—Angelo State University, Por-  
ter Henderson Library

**San Antonio**—Palo Alto College, Learning  
Resources Center  
Saint Mary's University: Academic Library;  
School of Law Library  
San Antonio College Library  
San Antonio Public Library  
Trinity University Library  
University of Texas at San Antonio Library

**San Marcos**—Southwest Texas State Uni-  
versity Library

**Seguin**—Texas Lutheran College, Blumberg  
Memorial Library

**Sherman**—Austin College, Abell Library

**Temple**—\* Temple Public Library

**Texarkana**—Texarkana College, Palmer  
Memorial Library

**Victoria**—University of Houston, Victoria  
College Library

**Waco**—Baylor University: Moody Memorial  
Library; Caston Law Library

**Wichita Falls**—Midwestern University, Mof-  
fett Library

**Utah**

**Cedar City**—Southern Utah State College  
Library

**Ephraim**—Snow College, Lucy A. Phillips  
Library

**Logan**—Utah State University, Merrill Library  
and Learning Resources Center  
(Regional Depository)

**Ogden**—Weber State College, Stewart  
Library

**Provo**—Brigham Young University:  
Harold B. Lee Library; Law Library

**Salt Lake City**—\* Salt Lake City Public  
Library  
University of Utah: Eccles Health Sciences  
Library; Law Library; Marriott Library  
Utah State Library  
Utah State Supreme Court, Law Library

## Vermont

**Bennington**—\* Bennington College, Crosset  
Library

**Burlington**—University of Vermont, Bailey/  
Howe Library

**Castleton**—Castleton State College, Calvin  
Coolidge Library

**Johnson**—Johnson State College, John  
Dewey Library

**Lyndonville**—Lyndon State College, Samuel  
Read Hall Library

**Middlebury**—Middlebury College, Egbert  
Starr Library

**Montpelier**—Vermont Department of  
Libraries

**Northfield**—Norwich University Library

**South Royalton**—Vermont Law School  
Library

## Virgin Islands

**Saint Croix**—Virgin Islands Division of  
Libraries Depository at Florence  
Williams Public Library

**Saint Thomas**—University of the Virgin  
Islands, Ralph M. Paiewonsky Library

## Virginia

**Alexandria**—Department of the Navy, Office  
of Judge Advocate, General Law  
Library

**Arlington**—George Mason University  
School of Law Library  
U.S. Patent and Trademark Office, Scien-  
tific and Technical Information Center

**Blacksburg**—Virginia Polytechnic Institute  
and State University, Carol M. Newman  
Library

**Bridgewater**—Bridgewater College, Alex-  
ander Mack Memorial Library

**Charlottesville**—University of Virginia:  
Alderman Library (Regional Depository);  
Arthur J. Morris Law Library

**Chesapeake**—Chesapeake Public Library

**Danville**—Danville Community College,  
Learning Resources Center

**Emory**—Emory and Henry College, Kelly  
Library

**Fairfax**—George Mason University, Fenwick  
Library

**Fredericksburg**—Mary Washington College  
Library

**Hampden-Sydney**—Hampden-Sydney  
College, Eggleston Library

**Hampton**—Hampton University, Huntington  
Memorial Library

**Harrisonburg**—James Madison University,  
Carrier Library

**Lexington**—Virginia Military Institute,  
Preston Library

Washington and Lee University: University  
Library; Wilbur C. Hall Law Library

**Lynchburg**—\* Jones Memorial Library

**Martinsville**—Patrick Henry Community  
College Library

**Norfolk**—Norfolk Public Library  
Old Dominion University Library  
U.S. Armed Forces Staff College Library

**Petersburg**—Virginia State University,  
Johnston Memorial Library

**Quantico**—Federal Bureau of Investigation,  
Academy Library  
U.S. Marine Corps Education Center,  
James Carson Breckinridge Library

**Reston**—Department of the Interior, Geo-  
logical Survey Library

**Richmond**—\* Richmond Public Library  
U.S. Court of Appeals, Fourth Circuit  
Library  
University of Richmond: Boatwright Memo-  
rial Library; Law School Library  
Virginia Commonwealth University Library  
Virginia State Law Library  
Virginia State Library and Archives

**Roanoke**—Hollins College, Fishburn Library

**Salem**—Roanoke College Library

**Williamsburg**—College of William and Mary:  
Marshall-Wythe Law Library; Swem  
Library

**Wise**—Clinch Valley College, John Cook  
Wyllie Library

## Washington

**Bellevue**—Bellevue Public Library, King  
County

**Bellingham**—Western Washington Univer-  
sity, Mabel Zoe Wilson Library

**Bremerton**—\* Kitsap Regional Library

**Cheney**—Eastern Washington University,  
JFK Library

**Des Moines**—Highline Community College  
Library

**Ellensburg**—Central Washington University  
Library

**Everett**—Everett Public Library

**Longview**—\* Longview Public Library,  
Cowlitz Library and Learning Service

**Olympia**—Evergreen State College,  
Daniel J. Evans Library  
Washington State Law Library  
Washington State Library (Regional Depos-  
itory)

**Port Angeles**—North Olympic Library Sys-  
tem, Port Angeles Branch

**Pullman**—Washington State University  
Library

**Seattle**—\* Government Research Assistance  
Library  
Seattle Public Library  
University of Washington: Suzzallo Library;  
Marian Gould Gallagher Law Library  
U.S. Court of Appeals, Ninth Circuit Library

**Spokane**—Gonzaga University, School of  
Law Library  
Spokane Public Library

**Tacoma**—Tacoma Public Library  
University of Puget Sound: Collins Memo-  
rial Library; School of Law Library

**Vancouver**—Fort Vancouver Regional  
Library

**Walla Walla**—Whitman College, Penrose  
Memorial Library

**Yakima**—\*Yakima Valley Regional Library

## West Virginia

**Athens**—Concord College Library

**Bluefield**—Bluefield State College, Hardway Library

**Charleston**—Kanawha County Public Library  
West Virginia Library Commission

West Virginia Supreme Court Law Library

**Elkins**—Davis and Elkins College Library

**Fairmont**—Fairmont State College Library

**Huntington**—Marshall University, James E. Morrow Library

**Institute**—West Virginia State College, Drain-Jordan Library

**Montgomery**—West Virginia Institute of Technology, Vining Library

**Morgantown**—West Virginia University Library (Regional Depository)

**Parkersburg**—\*Parkersburg and Wood County Public Library

**Salem**—Salem-Tolkyo College Library

**Shepherdstown**—Shepherd College, Scarborough Library

**Weirton**—Mary H. Weir Public Library

**West Liberty**—\*West Liberty State College, Paul N. Elbin Library

**Wheeling**—\*Ohio County Public Library

## Wisconsin

**Appleton**—Lawrence University, Seeley G. Mudd Library

**Beloit**—Beloit College, Col. Robert H. Morse Library

**Eau Claire**—University of Wisconsin-Eau Claire, William D. McIntyre Library

**Fond Du Lac**—Fond Du Lac Public Library

**Green Bay**—University of Wisconsin-Green Bay, Library Learning Center

**Janesville**—\*Janesville Public Library

**Kenosha**—\*Kenosha Public Library

**La Crosse**—La Crosse Public Library  
University of Wisconsin-La Crosse, Murphy Library

**Madison**—\*Legislative Reference Bureau  
Madison Public Library

State Historical Society Library (Regional Depository)

University of Wisconsin-Madison: Memorial Library; Law Library

Wisconsin State Law Library

**Milwaukee**—Alverno College Library Media Center

\*Legislative Reference Bureau

Marguerite University Law Library

Medical College of Wisconsin, Inc., Todd Wehr Library

Milwaukee County Law Library

Milwaukee Public Library (Regional Depository)

Mount Mary College Library

University of Wisconsin-Milwaukee Library

**Oshkosh**—\*Oshkosh Public Library

University of Wisconsin-Oshkosh,  
Forrest R. Polk Library

**Platteville**—University of Wisconsin-

Platteville, Karrmann Library

**Racine**—Racine Public Library

**Ripon**—Ripon College Library

**River Falls**—University of Wisconsin-River Falls, Chalmer Davee Library

**Sheboygan**—\*Mead Public Library

**Stevens Point**—University of Wisconsin-Stevens Point, Documents Department

**Superior**—Superior Public Library

University of Wisconsin-Superior, Jim Dan Hill Library

**Waukesha**—\*Carroll College Library

Waukesha Public Library

**Wausau**—Marathon County Public Library

**Whitewater**—University of Wisconsin-Whitewater, Library and Learning Resources Center

## Wyoming

**Casper**—Natrona County Public Library

**Cheyenne**—Wyoming State Law Library  
Wyoming State Library (Regional Depository)

**Gillette**—Campbell County Public Library

**Laramie**—University of Wyoming: Coe Library; Law Library

**Powell**—Northwest Community College Library

**Riverton**—Central Wyoming College Library

**Rock Springs**—Western Wyoming Community College Library

**Sheridan**—Sheridan College, Griffith Memorial Library

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## FEDERAL STATISTICAL REPORTS BY AGENCY

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This section is designed to familiarize users of the *Guide* with key statistical programs and publications of other Federal agencies. Since only selected reports are noted, some readers may want to contact the agencies for more comprehensive lists of their publications. Also, there are additional Federal agencies that offer statistical information listed in the next section, Other Federal Sources of Statistics.

While many publications can be ordered through the Government Printing Office (GPO), some must be ordered directly from the individual agencies.

### Bureau of Economic Analysis

The Bureau of Economic Analysis (BEA), an agency of the Economics and Statistics Administration (ESA), under the Department of Commerce, provides statistics on economic growth, inflation, regional development, and the Nation's role in the world economy.

BEA's current regional, national, and international estimates first appear in the form of news releases. This information is available on recorded telephone messages, online through the Economic Bulletin Board, and in printed reports.

Recorded telephone messages briefly (in 3-5 minutes) summarize key estimates immediately after their release. The usual time of release (eastern standard or eastern daylight

time) and the telephone numbers to call are outlined here. Leading indicators (8:30 a.m.), 202-898-2450. The message is updated weekly, usually on Monday, to include recently available component data that will be incorporated into the next release. Gross Domestic Product (8:30 a.m.), 202-898-2451; Personal Income and Outlays (10:00 a.m.), 202-898-2452; Merchandise Trade, Balance of Payments Basis or U.S. International Transactions (10:00 a.m.), 202-898-2453.

The Economic Bulletin Board provides online computer access to news releases and other information and is maintained by the ESA Office of Business Analysis (OBA). News releases are available on the Bulletin Board shortly after their release. Selected estimates and articles are also available. The Bulletin Board may be accessed by personal computer, computer terminal, or word processor equipped with a modem; the information available (which includes information from several Federal agencies) may either be viewed on the user's screen or downloaded. This service is available from (OBA). A \$35.00 registration fee covers 2 hours of connect time; additional time is charged by the minute. Instant hook-up is available. For more information, call OBA at 202-377-1986.

Publications listed below are available from either BEA or GPO (Government Printing Office, Superintendent of Documents). Six sets of *BEA Reports* present the information contained in the BEA news releases for the following areas: gross domestic product; personal income and outlays; regional reports; international reports; and composite indexes of leading, coincident, and lagging indicators. These reports are available as a set, which includes about 55 reports, from BEA: Accession No. 53-91-11-019 for a subscription price of \$110.00 per year. Subsets also are available individually as described below. For more information on BEA's programs, products, and services, contact the Public Information Office, BE-53, Bureau of Economic Analysis, U.S. Department of Commerce, Washington, DC 20230; 202-523-0777. *A User's Guide to BEA Information* lists the most recently released and most frequently requested products and services from BEA. Single copies are available from the Public Information Office.

*BEA Reports: Gross Domestic Product.*

These monthly reports, with summary National Income and Product Account estimates, feature GDP and corporate profits. Reports are mailed the day after estimates are released. Available from BEA by subscription. Accession No. 53-91-11-015, \$24.00 per year.

*BEA Reports: Personal Income and Outlays.*

These monthly reports with summary National Income and Product Account estimates feature personal income and outlays. Reports are mailed the day after estimates are released. Available from BEA by subscription. Accession No. 53-91-11-014, \$24.00 per year.

*BEA Reports: Regional Reports.* These reports, usually issued six times a year, present summary estimates of State personal income (quarterly and annual)

and of county and metropolitan area personal income (annual). Reports are mailed the day after estimates are released. Available from BEA by subscription. Accession No. 53-91-11-017. \$12.00 per year.

**BEA Reports: International Reports.** These reports, usually issued 13 times a year, offer summary estimates of merchandise trade, balance of payments basis (quarterly); summary of international transactions (quarterly); capital spending of majority-owned foreign affiliates (semiannual); direct investment (annual); and related topics. Reports are mailed the day after estimates are released. Available from BEA by subscription. Accession No. 53-91-11-018. \$26.00 per year.

**BEA Reports: Composite Indexes of Leading, Coincident, and Lagging Indicators.** These are monthly reports with summary estimates of the composite indexes. Reports are mailed the day after estimates are released. Available from BEA by subscription. Accession No. 53-91-11-016. \$24.00 per year.

**Survey of Current Business** is a monthly journal containing estimates and analyses of U.S. economic activity. Included are a review of current economic developments and articles pertaining to the national, regional, and international economic accounts and related topics. Current quarterly estimates of the national income and product accounts appear every month. In addition, the "S" pages contain 36 pages of tables of economic indicators such as personal income, business sales and inventories, commodity prices, producer prices, labor force and earnings. The "C" pages consist of tables and charts for over 250 series which are widely used in business cycle analysis. Annual national income and product account statistics are published in the July issue. GPO S/N List ID SCUB. \$29.00, subscription. \$ 8.00, single copy.

**Business Statistics, 1961-88.** This biennial publication contains monthly or quarterly data for series that appear in the S-pages of the *Survey of Current Business*. These series include business sales, inventories, and orders, prices; employment and unemployment; construction; banking and finance; transportation; and many other industries and commodities. An appendix provides data for several BEA series—national income and product accounts, U.S. and international transactions. *Business Statistics, 1961-90* will be available from GPO in June 1992.

## Bureau of Justice Statistics

The Bureau of Justice Statistics (BJS), part of the Department of Justice, sponsors surveys and analyzes, publishes, and disseminates statistical information on crime, victims

of crime, criminal offenders, and operations of justice systems at all levels of government.

BJS designs collection programs and enters into agreements with other Federal agencies, private associations, and research organizations to collect data. More than two dozen data collection series have been developed by BJS using a variety of methods, including household interviews, censuses and sample surveys of criminal justice agencies and of prisoners and inmates, and compilations of administrative records.

To disseminate results, BJS maintains a number of specialized mailing lists, including Drugs and Crime Data, White-Collar Crime, National Crime Victimization Survey, Corrections, Law Enforcement, and Courts, in addition to its regularly released Bulletins, Special Reports, and Technical Reports on a wide variety of subjects such as parole and probation, privacy and security, and courts. There is no charge for most of the data published by BJS.

For more information about publications, mailing lists, and ordering, contact the Justice Statistics Clearinghouse, National Criminal Justice Reference Service, Box 6000, Rockville, MD 20850; 1-800-732-3277.

The publications listed below are a sampling of available material:

***Criminal Victimization in the United States, 1988.*** Prepared under the National Crime Victimization Survey Program, this annual report is based on findings from a continuous survey of a representative sample of housing units across the U.S. The survey focuses on the personal crimes of rape, robbery, assault, and larceny; and household crimes of burglary, larceny and motor vehicle theft. The crimes are examined by their frequency, the characteristics of victims and offenders, the circumstance surrounding the offenses and their impact, and the pattern of police reporting. Order No. NCJ-129391 (1991).

***Correctional Populations in the United States.*** This third annual consolidation of data gathered in various statistical programs maintained by BJS. It replaces four separate publications, emphasizing the connections between the segments of the growing number of persons under correctional supervision. Order No. NCJ-130445 (1991).

***Drugs, Crime, and the Justice System: A National Report.*** This four-color report presents comprehensive recent data from a broad range of sources in nontechnical language, including drugs and crime, the extent and consequences of drug use, the illegal drug business, society's response to the drug problem, drugs and the criminal justice system, and the costs of drug use. Data sources include Federal, State, and local government, public and private

research groups, and university-based research. 200+ pages, index. Order No. NCJ-133652 (1992).

***Report to the Nation on Crime and Justice.*** This publication presents national data on crime and the criminal justice system in a mainly graphics format geared toward a nontechnical audience. It gives an overview of crime, including types of crime and trends. It profiles victims of crime and offenders and presents an overview of criminal justice at the Federal, state, and local levels of government, including prosecution of juveniles and adults, sentencing and sanctions, correctional facilities, and the costs of the criminal justice system. Order No. NCJ-105506 (1988).

***Sourcebook of Criminal Justice Statistics, 1989.*** This is an annual, comprehensive collection of statistical information about crime and criminal justice. Data are nationwide in scope and, where possible, displayed by regions, states, and cities. The book is divided into six sections: Characteristics of the Criminal Justice Systems, Public Attitudes Toward Crime and Criminal Justice-related Topics, Nature and Distribution of Known Offenses, Characteristics and Distribution of Persons Arrested, Judicial Processing of Defendants, and Persons Under Correctional Supervision. Order No. NCJ-130580 (1991).

***Capital Punishment.*** This is a serial publication in the National Prisoner Statistics program that provides data on the Nation's death-row population and on the legal status of death penalty laws. Such characteristics as age, sex, race, marital status, and level of education are given, along with the state of incarceration. Data on criminal histories of persons on death row are included, along with statutory changes in each jurisdiction, methods of execution, and automatic appeals. Order No. NCJ-131648 (1991).

***Prosecution of Felony Arrests.*** This is a series of annual surveys describing the prosecution of adult felony arrests in urban prosecutors' offices. Data are provided on what happens to criminal cases between arrest and incarceration and explains the role of the prosecutor in the felony disposition process. Order No. NCJ-130914 (1992).

***Felony Sentences in State Courts.*** A probability sampling of counties and felony cases to obtain national estimates of the number of persons convicted of felonies, what they were convicted of, what sanctions they were sentenced to, and in cases sentenced to prison, jail, or probation, the length of the sentence. Also provided, is information on felons' demographic characteristics as well as case processing variables such as types and duration of trials. Order No. NCJ-126923 (1991).

*Justice Expenditure and Employment in the United States, 1988.* This report provides comprehensive data on spending and personnel levels for Federal, State, and local governments in six sectors: police protection, judicial, legal services and prosecution, public defense, corrections, and other criminal justice. The report presents expenditure data on capital outlays, intergovernmental expenditure, and employment and payroll data by sector for individual State governments and the aggregate of local governments by type (counties and municipalities) within each State. Order No. NCJ-125619 (1991).

*Compendium of Federal Justice Statistics.* This report describes the processing of Federal criminal cases: investigation, prosecution, adjudication, sentencing, and corrections. Order No. NCJ-130474 (1992).

BJS Bulletins present data selected from its various statistical series in a nontechnical format. Each Bulletin presents the latest information on a particular aspect of crime or the administration of justice. The following are a sample of those available. Contact BJS for a complete list.

*Jail Inmates.* This bulletin contains findings from the Annual Survey of Jails, developed to provide an estimate of the inmate population between National Jail Censuses, which are conducted every 5 years. Order No. NCJ-129756 (1991).

*Crime and the Nation's Households.* Published annually since 1979, this bulletin presents data by the ethnicity and region of the household, by type of crime, as measured by the National Crime Victimization Survey. Offenses include those attempted as well those completed. Order No. NCJ-130302 (1991).

*Probation and Parole.* Annually presents data on adults on probation and parole, by state, from the Uniform Parole Reports and the National Probation Reports. Order No. NCJ-133285 (1991).

*State and Local Police Departments, 1990 and Sheriffs' Departments, 1990.* These reports contain findings from the Law Enforcement Management and Administrative Statistics (LEMAS) survey. This survey of sheriffs' department and State and local police departments is conducted every 3 years and includes information on operations, equipment, characteristics of personnel, salaries, expenditures, and educational and training requirements. Order No. NCJ-133284 (police) and NCJ-133283 (sheriffs) (1990).

A series of Special Reports published by BJS focuses on a specific topic in criminal

justice. They are written in nontechnical language and aimed at a broad audience. The following are a sample of those available:

*Drugs and Jail Inmates, 1989.* This report, from a 1989 survey of a representative sample of 395,554 inmates held in 3,312 city and county jails, describes the characteristics of the Nation's jail inmates, focusing on those charged with or convicted of a drug offense and those who had used drugs. It describes criminal histories, race, sex, ethnicity, type of drugs used, family history of drug abuse, and treatment history. Order No. NCJ-130836 (1991).

*Female Victims of Violent Crime.* National Crime Victimization Survey data from a sample of more than half a million women from 1979 to 1987 are the focus of this report. Thousands who were raped and thousands who were victims of violence by family members or boyfriends described their experiences to interviewers: whether they reported the crime to police, reasons why they did not, weapons used, injuries, medical care, self-protective measures, as well as the victim's family income, race, age and whether the offender was a stranger or was known to the victim. Order No. NCJ-126826 (1991).

*Profile of Jail Inmates, 1989.* This report summarizes findings from the 1989 Survey of Inmates of Local Jails, including socioeconomic data, detention status, current and previous offenses and sentences, prior drug and alcohol use, and characteristics of victims. Results are compared with results from the last survey, done in 1983. Order No. NCJ-129097 (1991).

*School Crime.* This report summarizes responses collected by the National Crime Victimization Survey in a special supplement used by interviewers during the first half of 1989 representing an estimated 21.6 million students ages 12 to 19. This analysis accounts for crime experienced by males and females; blacks and whites; Hispanics and non-Hispanics; residents of central cities, suburbs, and rural areas; and public and private school students. Data on grade levels and security measures are also included, as are student perceptions of the prevalence of street gangs, students' fear of attacks at school, and the availability of drugs or alcohol at school. Order No. NCJ-131645 (1991).

*Teenage Victims.* National Crime Victimization Survey data from a sample of more than half a million women from 1985 to 1988 are the focus of this report. The data represent an estimated 1.9 million violent victimizations sustained by 28.1 million teenagers during each of those years. Victim's sex, race, and location of residence are included, as well as the severity of the crime and injuries,

medical care, weapons use, offender characteristics and use of drugs or alcohol as perceived by the victim, and reporting to law enforcement authorities and school officials. Order No. NCJ-128129 (1991).

*Women in Prison.* This report describes women in prison, using primarily data from the 1986 Survey of Inmates in State Correctional Facilities. It includes their criminal histories, prior drug use, self-reported backgrounds of physical and sexual abuse, and the custodial situations of their young children. Survey respondents in 1986 are compared with those in 1979. Order No. NCJ-127991 (1991).

BJS Technical Reports address issues of statistical methodology and special topics in a more detailed and technical format that the Bulletins and Special Reports. Contact BJS at 202-307-0004 for titles and ordering information.

## Bureau of Labor Statistics

The Bureau of Labor Statistics (BLS), part of the Department of Labor, is one of the principal data gathering agencies of the Federal Government. In the broad field of labor economics, BLS collects data relating to employment; unemployment and other characteristics of the labor force; prices and family expenditures; wages, other worker compensation, and industrial relations; productivity and technological change; and occupational safety and health.

Most of the data are collected in surveys conducted by BLS; other information is collected on a contract basis by the Bureau of the Census or in cooperation with State agencies.

Data are supplied voluntarily by business establishments and members of private households, then tabulated, analyzed, and issued in the form of monthly press releases, special publications, and periodicals.

All of the publications listed can be ordered from the Government Printing Office (GPO). The stock number (S/N) and price are given for each entry. For information on other publications, contact Bureau of Labor Statistics, Room 2831A, 441 G Street, NW, Washington, DC 20212; 202-523-1221.

*Consumer Price Index.* Reports monthly on consumer price movements of urban consumers and urban wage earners. GPO S/N 729-002-00000-3. \$7.00, single copy. \$21.00, subscription.

*Producer Price Indexes.* This monthly periodical includes a comprehensive report on producer price movements, plus regular tables and technical notes. GPO S/N 729-009-00000-8. \$10.00, single copy. \$32.00, subscription.

*Employment and Earnings.* This monthly periodical covers employment and unemployment developments, plus statistical tables on national, State, and

area employment, hours, and earnings. GPO S/N 729-004-00000-6. \$10.00, single copy. \$31.00, subscription.

**Compensation and Working Conditions.** This monthly periodical reports on employee compensation, including wages, salaries, benefits, and other aspects of the work environment, such as safety and health. It presents information on wage and benefit changes resulting from collective bargaining settlements and unilateral management decisions; statistical summaries; and special reports on wage trends, most aspects of employee benefits, and various aspects of collective bargaining. GPO S/N 729-003-00000-0. Single copy \$4.25. Subscription \$18.00.

**Geographic Profile of Employment and Unemployment.** Issued annually, this report includes labor force data from the Current Population Survey conducted by the Bureau of the Census, for states and selected large metropolitan areas and central cities. Also included are unemployment rates by age, race, and sex; data on demographic characteristics of employed and unemployed; and data by occupation and industry. GPO S/N 029-001-03079-7. \$11.00, single copy.

**Employment, Hours, and Earnings, States and Areas.** Presents monthly and annual data on employment, hours, and earnings in states and metropolitan areas by industry. Bulletin 2320. 5 Vols. GPO S/N 029-001-03000-2. (1972-87). \$55.00.

**CPI Detailed Report.** This monthly publication provides a comprehensive report on consumer price movements, plus statistical tables, charts, and technical notes. GPO S/N 729-003-0000-0 \$6.00, single copy. \$23.00, subscription.

**Monthly Labor Review.** Each issue includes analytical articles, 53 pages of current statistics, reports on industrial relations, book reviews, and other features. GPO S/N 729-007-00000-5. \$5.00, single copy. \$22.00, subscription.

**Occupational Outlook Quarterly.** Each issue helps guidance counselors, career planners, and others keep informed of changing career opportunities. GPO S/N 729-008-0000-1. \$2.50, single copy. \$6.50, subscription.

**Area Wage Surveys.** These bulletins cover office, professional, technical, maintenance, custodial, and material movement jobs in major metropolitan areas. GPO S/N 829-001-0000-4. \$89.00, subscription.

**Working Women: A Chartbook.** Presents an array of data on women in the labor force, highlighting their labor market status today and its changes over the past three decades. Contains text, charts and tables on women's labor

force participation, employment, unemployment, occupational distribution, earnings as compared to men's, and family characteristics. GPO S/N 029-001-03081-9. \$4.00.

## Energy Information Administration

The Energy Information Administration (EIA), part of the Department of Energy, is responsible for collecting and publishing data on energy production, consumption, prices, resources, and projections of supply and demand. Subjects covered are coal and coal products, petroleum, natural gas, nuclear fuels, solar energy, electric power, and nuclear power plants. The various publications contain national, state, and international data.

The publications listed below are only a sample of a wide variety of material available from EIA. The *EIA Publications Directory 1990: A User's Guide*, lists all EIA publications and is available by contacting the National Energy Information Center, EI-231, Energy Information Administration, Room 1F-048, Forrestal Building, Washington, DC 20585; 202-586-8800.

The publications may be ordered from the Government Printing Office (GPO). The stock number (S/N) and price are given for each publication.

**Annual Energy Review.** Provides statistics on U.S. energy supply, production, disposition, and consumption. Ten sections cover energy overview; energy indicators; energy resources, exploration, development, and reserves; petroleum; natural gas; coal; electricity; nuclear energy; wood, waste, solar, and geothermal energy; and international energy. 119 tables. GPO S/N 061-003-00701-5 (1990). \$17.00.

**International Energy Annual.** Provides current data and trends (1980-88) for production, consumption, stocks, imports, and exports of primary energy commodities in more than 190 countries, dependencies, and areas of special sovereignty. Prices for crude oil and petroleum products are included. Primary energy sources are crude oil, natural gas plant liquids, natural gas, coal, hydroelectric power, and nuclear electric power. Natural gas and coal supply and disposition are also given 36 tables. GPO S/N 061-003-00692-2 (1989). \$11.00.

**Coal Data: A Reference.** Covers all aspects of the coal industry. Data are given for reserves, production/mining, supply/disposition, consumption, exports, and prices. Coal classifications are also provided. The most recent data are for 1987 with some historical series. 37 tables. GPO S/N 061-003-00614-1 (1987). \$7.50

**Quarterly Coal Report.** Provides comprehensive information about U.S. coal production, consumption, exports, imports,

receipts, and stocks by quarter. Historical information and forecasts complete the report. Data are reported by state, census region, end-use sector (electric utilities, coke plants, other industrial and residential/commercial), and Standard Industrial Classification. Prices are also given for exports, imports, and receipts data. 68 tables. GPO S/N 761-012-00000-2. \$20.00, subscription. \$8.00, single copy.

**Coal Production 1990.** Provides comprehensive information about U.S. coal production, the number of mines, prices, productivity, employment, reserves, and stocks to a wide audience, including Congress, Federal and State agencies, the coal industry, and the general public. 82 tables. GPO S/N 061-003-00717-1. \$7.50.

**Electric Power Monthly.** Presents monthly summaries of electric utility statistics at the national, census division, and State level for net generation, fuel consumption, fuel stocks, quantity of fuel, cost of fuel, electricity sales and retail prices of electricity. Company and plant level information are presented on capability of new plants, net generation, fuel consumption, fuel stocks, quantity and quality of fuel and cost of fuel. 37 tables. GPO S/N 761-002-00000-7. \$87.00, subscription. \$10.00, single copy.

**Electric Power Annual.** Presents a summary of electric utility statistics at the national, regional and State levels. It provides industry decisionmakers, government policymakers and the general public with historical data that may be used in forming various perspectives on electric issues that lie ahead. New sections include data on financial statistics, environmental statistics and electric power transactions Sections on generating capability; net generation; fossil fuel statistics; and electric power transactions. Sections on generation; net generation; fossil fuel statistics; and electricity sales, revenues, and prices are presented. 47 tables. GPO S/N 061-003-00685-0 (1989). \$8.00.

**Natural Gas Monthly.** This report highlights activities, events, and analyses of interest to public and private sector organizations associated with the natural gas industry. Volume and price data are presented each month for natural gas production, distribution, consumption, and interstate pipeline activities. Producer-related activities and underground storage data are also reported. 34 tables. GPO S/N 761-008-00000-5. \$70.00, subscription. \$9.00, single copy.

**Natural Gas Annual.** Contains information on the production, reserves, imports, exports, interstate movements, storage, consumption, and price of natural gas. Annual summary data at the State and

national levels are provided, as well as total gas supply/ disposition balances. Data on the quantity and price of natural gas consumption are shown for major end-use categories. Volume I contains 95 tables summarizing natural gas supply and disposition from 1984-1988 for each census division and each State. Volume II shows in 23 tables, annual historical data at the national level from 1930 to 1988, and by State from 1967 to 1988. GPO S/N 061-003-00674-4. Vol. I 1989. \$12.00

*U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, Annual Report.* This report presents estimates of proved reserves of crude oil, natural gas, and natural gas liquids, as of December 31, 1988, and production volumes for year 1988 for the U.S. and selected states and state subdivisions. The data are used the Congress, Federal and State agencies, industry and other interested parties. 75 tables. GPO S/N 061-003-00721-0 (1990). \$7.00.

*Petroleum Supply Monthly.* Contains data on supply, disposition, and stocks for each Petroleum Administration Defense (PAD) District with U.S. totals; production of crude oil and lease condensate, by PAD District and state; natural gas processing; refinery operations by PAD District, imports/ exports; stocks; transportation between PAD Districts, and heavy oil by sulfur content. 46 tables. GPO S/N 761-011-00000-6. \$78.00, subscription. \$9.00, single copy.

*Petroleum Supply Annual.* Contains information on the supply and disposition of crude oil and petroleum products. The publication reflects data that were collected from the petroleum industry during 1988 through annual and monthly surveys. Volume I contains two sections, U.S. Petroleum Supply and Refinery Capacity, each with final annual data. (40 tables). Volume II contains final statistics for each month of 1988 and replaces data previously published in the *Petroleum Supply Monthly* (28 tables). Vol.I (1990). GPO S/N 061-003-00702-3 \$10.00. Vol.II (1990). GPO S/N 061-003-00703-1. \$30.00.

*Petroleum Marketing Monthly.* This publication reports marketing data for the U.S., Petroleum Administration for Defense (PAD) Districts, and each state for the current month, the previous month, and the corresponding month of the previous year. Shown for 16 individual petroleum products are sales prices, sales volumes, percentages of sales, and first sales for consumption. Data are given by type of seller and by type of sale. 56 tables. GPO S/N 761-010-00000-0. \$87.00, subscription. \$10.00, single copy.

*Petroleum Marketing Annual.* Contains statistical data on a variety of crude oils and refined petroleum products. It also

provides statistics on crude oil costs and refined petroleum products sales for use by industry, government, private sector analysts, educational institutions, and consumers. Data on crude oil include the domestic first purchase price, the f.o.b. and landed cost of imported crude oil, and the refiners' acquisition cost of crude oil. Sales data for motor gasoline, distillates, residuals, aviation fuels, kerosene, and propane are presented. 73 tables. GPO S/N 061-003-00591-8 (1989). \$21.00.

*Commercial Nuclear Power. Prospects for the United States and the World.* An annual publication that presents historical data, current status, and outlook projections for commercial nuclear power reactors for all countries outside centrally planned economic areas. U.S. nuclear capacity and generation projections through 2020 are presented for various nuclear power supply scenarios and foreign nuclear power projections are provided through 2010. 36 tables. GPO S/N 061-003-00714-7 (1991). \$8.50

*State Energy Data Report: Consumption Estimates.* Issued annually, this report provides estimates of energy consumption by principal energy source, by major end-use sector, and by State. 323 tables. GPO S/N 061-003-00656-6 (1960-1989). \$23.00.

*Performance Profiles of Major Energy Producers.* Published annually, this report covers key financial trends, taxation, foreign and domestic petroleum developments, and coal/ nuclear/ alternative energy for 22 major energy producing companies. Information is developed from Form EIA-28, "Financial Reporting System," which examines year-to-date developments in the operation of these companies on a corporate level, by major line of energy business, and by major functions within each line-of-business. 120 tables. GPO S/N 061-003-00702-7 (1989). \$8.50.

*Residential Energy Consumption Survey: Consumption and Expenditures, April 1984 Through March 1985. Part I: National Data.* Issued biennially, this publication presents consumption and expenditure data for residential use of wood, natural gas, electricity, fuel oil, kerosene, and liquefied petroleum gas. Includes households in all types of housing units. 53 tables. GPO S/N 061-003-00635-3. (Part 1) (1989). \$15.00.

## Department of Agriculture

### Economic Research Service

The Economic Research Service (ERS) provides economic information to aid public policy officials and program managers in developing and administering agricultural and rural policies and programs.

ERS monitors economic activity, makes short-term forecasts of key economic indicators, and develops long-range projections of U.S. and world agriculture production, demand for production resources (land, water, and manufactured inputs), and demand for agricultural commodities and food products. It also measures returns to producers and evaluates how well the agricultural and food sectors meet the needs of domestic and foreign consumers.

ERS has four program divisions—Commodity Economics, Agriculture and Trade Analysis, Resources and Technology, and Agriculture and Rural Economy—that carry out the four principal functions of ERS: research, situation and outlook analysis, staff analysis, and development of economic and statistical indicators.

Information from ERS is released through a variety of media, including research papers, situation and outlook periodicals, staff reports, professional and trade journals, radio and television, and direct computer access.

To order subscriptions to the following, call 1-800-999-6779.

#### *Economic Indicators of the Farm Sector.*

Comprises 6 reports published annually that updates economic trends in U.S. agriculture. Each issue explores a different aspect of income and expenses, national and State financial summaries, production and efficiency statistics, costs of production, and an annual overview. \$14.00, subscription.

*Foreign Agricultural Trade of the United States.* Updates the quantity and value of U.S. farm exports and imports, plus price trends. 8 issues per year. \$25.00.

*Foreign Ownership of U.S. Agricultural Land Through December 31: County-Level Data.* Presents data for each county to show the number of acres and parcels, value, owner's county of origin, and use of foreign-owned agricultural land. 128 pages. \$8.00. (1988)

*Agricultural Outlook.* Presents USDA's farm income and food price forecasts. It emphasizes the short term outlook, but also presents long-term analyses of issues ranging from international trade to U.S. land use and availability. 11 issues per year. \$26.00.

*Food Review.* This report offers the latest developments in food prices, product safety, nutrition programs, consumption patterns and marketing. 4 issues per year. \$11.00.

*Situation and Outlook.* These reports provide analyses and forecasts of all major agricultural commodities and related topics such as finance, farm inputs, land values, and world and regional developments. Commodities reported on are cotton and wool, dairy, feed, fruit and tree nuts, livestock and poultry, oil crops, rice, sugar and sweetener, tobacco, vegetables and specialties, and wheat. Number of issues and prices vary by commodity.

## National Agricultural Statistics Service

The National Agricultural Statistics Service (NASS) prepares estimates and reports on production, supply, price, and other items necessary for the operation of the U.S. agricultural economy.

The reports include statistics on field crops, fruits and vegetables, cattle, hogs, sheep, poultry, and related commodities or processed products. Other estimates are prices received by farmers for products sold and prices paid for commodities and services, indexes of prices received and paid, parity prices, farm employment, and farm wage rates.

Estimates are obtained through sample surveys of producers, processors, buyers, and others associated with agriculture. Information is gathered by mail, telephone, personal interviews, and field visits.

The 44 field offices prepare weekly, monthly, annual, and other periodic reports available to the public on a subscription basis. Information is obtained for some 75 crops and 50 livestock items as well as numerous items relating to agricultural production and marketing.

For additional information, and a copy of the 1992 *Agricultural Statistics Board Catalog*, contact the National Agricultural Statistics Service, U.S. Department of Agriculture, 14th and Independence Ave., SW, Washington, DC 20250; 202-447-4021.

*Agricultural Statistics*. Published annually, this comprehensive statistical reference contains current and historical data on agricultural production, supplies, consumption, facilities, costs, and returns. Approximately 600 pages. GPO S/N 001-000-04557-1 (1989). \$17.00.

## National Center for Education Statistics

The National Center for Education Statistics (NCES), part of the Department of Education, collects data from 57 state education agencies that report data for over 83,400 public schools and 15,400 local school districts. Data on staff and students are collected annually at the school, LEA (local education agency or school district) and state levels. Data on revenues and expenditures are also collected at the state level. This information is part of a Common Core of Data Survey used to collect statistical data on the 50 states, District of Columbia, and outlying areas.

Other surveys conducted by NCES include: School and Staffing Survey; Private School Survey; Fast Response Survey; National Postsecondary Student Aid Study; National Survey of Postsecondary Faculty; National Longitudinal Studies; National Assessment of Educational Progress; and the Integrated Postsecondary Education Data System, which includes statistics on institutional characteristics, fall enrollment, faculty salaries, earned degrees conferred, and the finances of institutions of higher education.

Most publications are available through the Government Printing Office (GPO) by calling 202-783-3238. Stock numbers (S/N) and prices are given.

For more information or to obtain a Publications Catalog, contact the Department of Education, 555 New Jersey Avenue, NW, Washington, DC 20208-5461; 202-219-1513.

*Digest of Education Statistics*. Published annually, this publication provides information for all educational levels for the United States and for individual states, including elementary and secondary schools, universities and colleges, and adult, vocational, and Federal programs. Subjects covered include enrollment, number of schools and colleges, number of teachers, finances, degrees earned, income of graduates, vocational education, adult education, and international education. Data are collected from a variety of sources, both public and private, although most of the information is from surveys conducted by NCES, which are also discussed. 459 pages. GPO S/N 065-000-00442-9 (1990). \$24.00.

*Projections of Education Statistics*. Issued annually, this report provides projections on enrollment; high school graduates; earned degrees; instructional staff; and expenditure for preschool, elementary, secondary, and higher education. Statistics from previous years are given along with the projection, usually providing 20 years of past data and 10 years of projections. 186 pages. GPO S/N 065-000-00440-2 (2001). \$9.50.

*Condition of Education: A Statistical Report*. Published annually, this publication provides data on key education indicators such as student performance, resources in the schools, student characteristics, special education, and racial and ethnic composition for elementary schools. Vol. 1 Elementary and Secondary Education. GPO S/N 065-000-00454-2 (1991). \$12.00. Vol. 2 Postsecondary Education. GPO S/N 065-000-0045501 (1991). \$12.00.

*1989 Education Indicators*. Contains information from volumes 1 and 2 of the *Condition of Education* plus all technical supporting data, supplemental information, and data sources. GPO S/N 065-000-00387-2. \$15.00.

*Key Statistics on Public Elementary and Secondary Education Reported by State and by Regional, Locale, and Wealth Clusters*. An annual publication that profiles educational characteristics of each state. Such characteristics include the number of schools and school districts, pupil-teacher ratio, and current expenditure per pupil. Also included are institutional pupil, staff, and finance data. GPO S/N 065-000-00457-7 (1988-89). \$8.00.

In addition to the publications listed above, NCES publishes the results of a large number of specialized surveys. These reports are unbound, consist of several pages, and are available from OERI by calling 1-800-424-1616, (metropolitan DC 202-0219-1513) or writing OERI, EIB, 555 New Jersey Avenue, NW, Washington, DC 20208-5461. Listed below are a sample of the reports available.

*Early Estimates: Key Statistics for Public and Private Elementary and Secondary Education: School Year 1990-91*. NCES 91-076.

*Early Estimates: National Higher Education Statistics: Fall 1990*. NCES 91-369.

*Public Elementary and Secondary State Aggregate Data, By State, for School Year 1989-1990 and Fiscal Year 1989*. NCES 91-035.

*Enrollment in Higher Education, Fall 1989*. NCES 91-217.

*Race/Ethnicity Trends in Degrees Conferred by Institutions of Higher Education: 1978-79 through 1988-89*. NCES 91-212.

*Current Funds Revenues and Expenditures of Institutions of Higher Education: Fiscal Years 1980-88*. NCES 91-219.

*Federal Support for Education: Fiscal Years 1980 to 1990*. NCES 91-631.

*American Education at a Glance*. NCES 90-655.

## National Center for Health Statistics

The National Center for Health Statistics (NCHS) is part of the Centers for Disease Control within the Public Health Service, under the Department of Health and Human Services.

It is the principal vital and health statistics agency of the Federal Government. Vital statistics include data on births, deaths, induced terminations of pregnancy, fetal deaths, fertility, life expectancy, marriages, and divorces.

Data are collected through either population-based surveys, or record-based surveys. Surveys based on population contain data collected through personal interviews or examinations. Record-based surveys collect data through laboratory tests, and from hospital, nursing home, and physician records. Data are designed mainly for use by federal policymakers, medical researchers, and others in the health community. While the needs of the Public Health Service are its primary focus, NCHS also responds to requests for special analyses of data that have already been collected.

To aid in data dissemination, and to assist data users, NCHS operates a centralized information program under the direction of the Scientific and Technical Information Branch. This program helps users locate and use NCHS data and identify other data sources; distributes mailing lists for new publications;

coordinates requests for presentations and exhibits; and provides publications and electronic data products catalogs, and ordering information.

Data from the surveys and studies conducted by NCHS are presented in a variety of publications. Many of the reports are part of the steadily growing *Vital and Health Statistics* series, available from the Government Printing Office, which currently includes over 500 individual publications grouped into several subseries. The *Advance Data From Vital and Health Statistics*, provides a means for early release of selected findings from NCHS surveys. This series is available individually and by subscription by contacting the Scientific and Technical Information Branch. Stock numbers for any of the publications in this series, are found in the *Catalog of Publications, 1980-88*, which can be obtained by contacting: Scientific and Technical Information Branch, National Center for Health Statistics, 3700 East-West Highway, Room 1-57, Hyattsville, MD, 20782; 301- 436-8500.

Data from NCHS are also available through electronic media, including data diskettes, CD-ROM's, and an extensive set of public-use data files. The *Catalog of Electronic Data Products* lists and describes the public use data files produced by NCHS, and can be obtained from the Scientific and Technical Information Branch.

More than 500 public-use data files, representing most of the NCHS data collection programs, are available for purchase. These files are prepared and disseminated to speed and enhance access to the full scope of data. The majority of the data files released by NCHS contain microdata to allow researchers to aggregate findings in whatever format appropriate for their analyses.

The first of a family of compact discs planned for major NCHS surveys is a CD-ROM from the 1987 National Health Interview Survey (NHIS). Additional CD-ROMS from other NCHS surveys are scheduled to be released in the spring of 1991. The 1987 NHIS CD-ROM provides access to more than 300,000 records on the use of medical services, acute and chronic conditions, and disabilities and restricted activities resulting from illness. It is available from either the U.S. Government Printing Office or the National Technical Information Service for \$13.00.

Listed below are the major surveys conducted by NCHS and where the data are published.

**National Health Interview Survey.** Based on interviews in approximately 50,000 households, this survey annually collects information on the health, illness, and disability status of the noninstitutionalized population. It provides data on the incidence of illness and accidental injuries, prevalence of chronic diseases and impairments, disability, physician visits, and hospitalizations. Published in Series 10 of *Vital and Health Statistics* and in *Advance Data From Vital and Health Statistics*.

**National Health and Nutrition Examination Survey.** This survey collects data through physical examinations and clinical and laboratory testing. The third survey in the series began in 1988, when over the course of 6 years, 45,000 people will be selected to participate. This survey focuses on population groups such as blacks, Hispanics, low-income persons, and the elderly. It provides data on the prevalence of specific conditions or chronic diseases; data on blood pressure, serum cholesterol, and body measurements; and nutritional status and deficiencies. Published in Series 11 of *Vital and Health Statistics* and in *Advance Data From Vital and Health Statistics*.

**National Survey of Family Growth.** This survey is conducted periodically through household interviews of women of childbearing age. Data such as family planning practices and attitudes, factors influencing trends and differences in fertility, and related aspects of maternal and child health are provided. Published in Series 23 of *Vital and Health Statistics* and in *Advance Data From Vital and Health Statistics*.

To meet the health statistics needs of the future, four of the Center's record-based surveys will be merged and expanded into one integrated survey of health care providers, called the National Health Care Survey. New data on alternative health care settings, such as hospices, home health agencies, and outpatient surgical centers, will be provided through this system.

Designed to include a patient followup component and linkage with the household interview survey, the National Health Care Survey will generate data that permit analyses of patient outcome, the relationship between use of health services and health characteristics, and the use of health care at the local level.

When fully operational by 1993, the survey will be a source of wide range of data on the health care field and significant resource for monitoring health care use, the impact of medical technology, and the quality of care provided to a changing American population.

The National Health Care Survey will build upon the following four current NCHS surveys: the National Hospital Discharge Survey, the National Ambulatory Medical Care Survey, the National Nursing Home Survey, and the National Master Facility Inventory.

**National Hospital Discharge Survey.** Conducted annually, this survey is based on a sample of 200,000 discharge records from 500 hospitals. Data include length of stay, source of payment, diagnoses, surgical procedures, characteristics of inpatients, and size, location, and ownership of hospitals.

Published in Series 13 of *Vital and Health Statistics* and in *Advance Data From Vital and Health Statistics*.

**National Ambulatory Medical Care Survey.** Conducted annually from 1974-1981, in 1985, and annually beginning in 1989. Data collected from the physician is based on a sample of 50,000 visits to 2,500 physicians in private practice. Statistics include characteristics of patients and services provided, diagnostic procedures, symptoms and diagnoses. Published in Series 13 of *Vital and Health Statistics* and in *Advance Data From Vital and Health Statistics*.

**National Nursing Home Survey.** Conducted periodically from 1963 to 1985, this survey is based on questionnaires and interviews with administrators and staff in a sample of 1,200 facilities. Data are provided on size and ownership of facilities, Medicare/ Medicaid certification, occupancy rate, days of care provided, and per diem charges. Patient data include health status and services received. Published in Series 13 of *Vital and Health Statistics* and in *Advance Data From Vital and Health Statistics*.

**National Master Facility Inventory.** Conducted periodically since 1963, this survey lists inpatient health facilities in the United States, including hospitals, nursing homes, and other facilities such as those for the mentally retarded or physically disabled. Data are provided on services, location, staff, and other characteristics of the facilities. Data are based on questionnaires sent directly to facilities or data collected by other Federal agencies, national associations, and State programs. Published in Series 14 of *Vital and Health Statistics* and in *Advance Data From Vital and Health Statistics*.

In addition to the *Vital and Health Statistics* series and the *Advance Data From Vital and Health Statistics*, the following are also major publications by NCHS:

**Vital Statistics of the United States.** This is an annual compilation of mortality, natality, marriage, and divorce data with extensive demographic and geographic detail. Vol. I Natality. GPO S/N 017-022-01048-8 (1988) \$32.00. Vol. II Mortality, Part A. GPO S/N 017-022-01056-9. \$34.00. Vol. II Mortality, Part B. GPO S/N 017-022-01046-1 (1988). \$40.00.

**Monthly Vital Statistics Report.** Provides monthly and cumulative data on births, deaths, natural increase, induced terminations of pregnancy, marriages, divorces, and infant deaths for states and the United States. Annual summaries and supplements also are published. Free copies available individually and by subscription. Contact NCHS at address listed above.

*Health United States.* This is the annual report to Congress on the Nation's health. It presents statistics concerning recent trends in the health care sector and detailed discussions of selected current health issues. Such topics as population, fertility, mortality, detriments and measures of health, manpower, and health care expenditures are covered. GPO S/N 017-022-01104-2 (1989). \$19.00.

## Social Security Administration

The Social Security Administration (SSA) conducts research and gathers data on the Old-Age, Survivors, and Disability Insurance (OASDI) and Supplemental Security Income (SSI) programs and on the populations served or potentially served by these programs.

The Office of Research and Statistics (ORS) has primary responsibility for developing and conducting SSA's research and statistical program. Its publications include analytical studies and statistical reports on the OASDI, SSI, and other social insurance and income-support programs.

SSA's Office of International Policy (OIP) conducts studies and disseminates information on foreign social security programs and developments as they may affect the U.S. program. Defined in the international context of "social security," these studies cover policies, problems, and provisions of the entire range of income—problems, and maintenance programs, with particular emphasis on the old-age, survivors, and disability insurance programs.

Many of SSA's publications are available from the Government Printing Office (GPO). The stock number and current pricing information are given below. To order publications not available from GPO, or to receive a SSA publications catalog, contact the ORS Publications Staff, Social Security Administration, Room 209 Van Ness Centre, 4301 Connecticut Avenue, NW, Washington, DC 20008; 202-282-7139.

*Social Security Bulletin.* This quarterly journal provides the latest data on beneficiaries under the Social Security program and related income-maintenance programs. Included are analytical articles; annual reviews; legislative updates; and the latest available program data. Subject areas include the aged, older workers, disabled, and poverty populations. GPO S/N 717-026-00000-4. \$21.00, subscription (includes the Annual Statistical Supplement described below); \$4.00, single copy.

*Annual Statistical Supplement to the Social Security Bulletin.* A yearly compilation of current and historical data on Social Security beneficiaries and covered workers, SSI recipients, and the economy in general. It contains more than 225 detailed tables as well as historical summaries and current legislative

developments in the areas of OASDI, SSI, Medicare, AFDC, and other related income-support programs. The Supplement is included with the subscription to the *Social Security Bulletin*, and is also available separately. GPO S/N 717-026-00054-3 (1991) \$18.00.

*Fast Facts and Figures About Social Security.* Issued annually, this report contains answers to the most frequently asked questions about Social Security beneficiaries and SSI recipients. It also provides information about the Medicare, Medicaid, and AFDC programs. GPO S/N 017-070-00450-4 (1990). \$2.50.

*Social Security Programs in the United States.* Issued biennially, this is a layman's guide to the Nation's network of publicly funded cash and in-kind income-support programs under the Social Security Act. It discusses the history and current program provisions of the OASDI, SSI, AFDC, Medicare, unemployment insurance, workers' compensation, and temporary disability insurance programs. GPO S/N 017-070-00451-2 (1991). \$4.50.

*Income of the Population 55 or Older.* Issued biennially, this report presents information on the broad economic picture of a cross section of the population aged 55 or older. The major focus is on their sources of income and the amounts they receive from various sources. GPO S/N 017-070-00449-1 (1988). \$6.00.

*OASDI Beneficiaries by State and County.* Issued annually, this report contains information on the number of persons who received OASDI benefits, the type of benefit they received, and the total amount of benefits paid for each state and county. Available from ORS.

*Supplemental Security Income State and County Data.* Issued annually, this report presents statistical data on the distribution of federally administered SSI payments to aged, blind, and disabled adults and blind and disabled children by state and county. Available from ORS.

*Earnings and Employment Data for Wage and Salary Workers Covered Under Social Security by State and County.* Issued annually, this report presents data on employment for wage and salary workers covered by the Social Security program. Data include number of workers, the amount of taxable wages, the amount of Social Security contributions and the workers' age, sex, and race. Data for the District of Columbia, American Samoa, Guam, U.S. citizens employed abroad by American employers, members of the Armed Forces, and persons employed on American vessels are also shown. Available from ORS.

*Social Security Programs Throughout the World.* Issued biennially, this report describes in chart format the Social Security systems of 141 countries. It provides information on the five major social security programs: old age, invalidity, and death; sickness and maternity; work injury; unemployment; and family allowances. GPO S/N 017-060-00444-4 (1989). \$18.00.

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## OTHER FEDERAL SOURCES OF STATISTICS

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The Census Bureau would like to thank the Association of Public Data Users for giving us permission to use the following contacts list. We have made minor adjustments, such as rearranging the entries by subject.

The list gives point-of-entry address and telephone number. Asterisks indicate those agencies which we know have internal telephone lists available for distribution to the public. Many agencies also provide free catalogs, publication lists, or program descriptions.

### Agriculture

Economic Research Service,\* Information Division, U.S. Dept. of Agriculture, 1301 New York Avenue, N.W., Room 208, Washington, DC 20005-4788. Information: 202-219-0515. Publications: 1-800-999-6799

National Agricultural Statistics Service,\* U.S. Dept. of Agriculture, 14th and Independence Avenue, S.W., Washington, DC 20250. Information/ Publications: 202-447-4021

### Banking and Finance

Federal Reserve System, 20th and Constitution Avenue, N.W., Washington, DC 20551. Information: 202-452-3000

Securities and Exchange Commission, 450 5th Street, N.W., Washington, DC 20549. Information: 202-272-3100

### Business/ Commerce

Bureau of the Census,\* U.S. Dept. of Commerce, Washington, DC 20233. Public Affairs: 301-763-4040. Data User Services Division: 301-763-4100.

Bureau of Economic Analysis,\* Public Information Office, U.S. Dept. of Commerce, 1401 K Street, N.W., Washington, DC 20230. Information/ Publications: 202-523-0777

Commerce News Room, U.S. Dept. of Commerce, Room 5058, Main Commerce, 14th Street and Constitution Avenue, N.W., Washington, DC 20230. Stat. Series Press Release Information: 202-377-4901. Recording of release times: 202-393-1847

Consumer Products Safety Commission,  
Office of Information and Public Affairs,  
5401 Westbard Ave., Bethesda, MD  
20207. Information: 301-504-0580

Federal Trade Commission, Public Refer-  
ence, 6th and Pennsylvania Avenue,  
N.W., Washington, DC 20580. Informa-  
tion/ Publications: 202-326-2000

International Trade Administration,\* Statisti-  
cal Division, Washington, DC 20230.  
Trade Statistics Division: 202-377-5242.  
Foreign Trade Statistics: 202-377-2185

Office of Business Analysis, U.S. Dept. of  
Commerce, Room 4878, Main Com-  
merce, 14th Street and Constitution  
Avenue, N.W., Washington, DC 20230.  
Electronic Bulletin Board and National  
Trade Data Bank: 202-377-1986.

Small Business Administration, 1441 L  
Street, N.W., Washington, DC 20416.  
Information: 202-827-5722

U.S. International Trade Commission,  
Department of Commerce, 500 E. St.,  
S.W., Washington, DC 20436. Informa-  
tion: 202-205-2000

## Crime and Law Enforcement

Bureau of Justice Statistics, U.S. Dept. of  
Justice, 633 Indiana Avenue, N.W.,  
Washington, DC 20531. Information  
Service: 202-307-6100, Justice Statis-  
tics Clearinghouse: 301-251-5500 or  
1-800-732-3277

Federal Bureau of Investigation, National  
Crime Information Center, U.S. Dept. of  
Justice, 10th Street and Pennsylvania  
Avenue, N.W., Washington, DC 20535.  
Information: 202-324-6242. Publica-  
tions: 202-324-2711

National Criminal Justice Reference Service,  
Box 6000, Rockville, MD 20850. Publica-  
tions: 301-251-5500 or 1-800-732-  
3277

National Institute of Justice, U.S. Depart-  
ment of Justice, 633 Indiana Avenue,  
N.W., Washington, DC 20531. Public  
Affairs: 202-307-0781

Office of Justice Assistance, Research and  
Statistics, Office of Congressional  
Affairs, U.S. Dept. of Justice, 633 Indi-  
ana Avenue, N.W., Washington, DC  
20531. Publications: 301-251-5500

Uniform Crime Reports Program, Federal  
Bureau of Investigation, U.S. Dept. of  
Justice, 9th Street and Pennsylvania  
Avenue, N.W., Washington, D.C. 20535.  
Information: 202-324-2614

## Defense

Department of Defense, Chief, Public Corre-  
spondence Division, Office of the  
Assistant Secretary of Defense (Public  
Affairs PC), The Pentagon, Washington,  
DC 20301-1400. Information: 703-697-  
5737

## Education

National Center for Education Statistics,\*  
Office of Educational Research and

Improvement, 555 New Jersey Avenue,  
S.W., Washington, DC 20208-5574.  
Information: 202-219-1513 or 1-800-  
424-1616.

## Environment

Environmental Protection Agency, 401 M  
Street, S.W., Washington, DC 20460.  
Information: 202-260-2090

## Health and Vital Statistics

Administration for Children, Youth, and Fam-  
ilies, U.S. Dept. of Health and Human  
Services, 200 Independence Avenue,  
S.W., Washington, DC 20201. Public  
Affairs: 202-245-2760

Administrator for Health Resources and Ser-  
vices, U.S. Dept. of Health and Human  
Services, 5600 Fishers Lane, Parklawn  
Building 14-05, Rockville, MD 20857.  
Publications: 301-443-2086. Informa-  
tion: 301-443-2216.

Agency for Health Care Policy and  
Research,\* U.S. Dept. of Health and  
Human Services, 2101 E. Jefferson St.,  
Suite 501, Rockville, MD 20852. Publi-  
cations: 800-358-9295. Information:  
301-227-8364

Alcohol, Drug Abuse, and Mental Health  
Administration, U.S. Dept. of Health  
and Human Services, 5600 Fishers  
Lane, Rockville, MD 20857. Informa-  
tion: 301-443-3783. Public Affairs: 301-  
443-8956. National Clearinghouse on  
Alcohol and Drug Information: 301-468-  
2600 or 1-800-729-6686

Assistant Secretary for Human Development  
Services, U.S. Dept. of Health and  
Human Services, Room 329-D, Hum-  
phrey Building, 200 Independence Ave-  
nue, S.W., Washington, DC 20201.  
Information: 202-472-7257.

Assistant Secretary for Planning and Evalua-  
tion, U.S. Dept. of Health and Human  
Services, Room 415-F, Humphrey  
Building, 200 Independence Avenue,  
S.W., Washington, DC 20201. Informa-  
tion: 202-245-1858.

Assistant Secretary for Public Affairs,\* U.S.  
Dept. of Health and Human Services,  
200 Independence Avenue, S.W.,  
Washington, DC 20201. Information:  
202-245-1850.

Centers for Disease Control, U.S. Dept. of  
Health and Human Services, 1600 Clif-  
ton Road, N.E., Atlanta, GA 30333.  
Public Inquiries: 404-639-3534

Food and Drug Administration, U.S. Dept. of  
Health and Human Services, 5600 Fish-  
ers Lane, Rockville, MD 20857. Loca-  
tor: 301-443-1996. Publications: 301-  
443-3170

Health Care Financing Administration, U.S.  
Dept. of Health and Human Services,  
200 Independence Avenue, S.W.,  
Washington, DC 20201. Public Affairs:  
202-245-6113. Office of Research: 410-  
966-6584

Health Resources and Services Administra-  
tion, U.S. Dept. of Health and Human  
Services, 5600 Fishers Lane, 14-43  
Parklawn Building, Rockville, MD  
20857. Public Affairs: 301-443-3376

Indian Health Service, Office of Tribal  
Affairs, U.S. Dept. of Health and  
Human Services, 5600 Fishers Lane,  
605 Parklawn Building, Rockville, MD  
20857. Public Affairs: 301-443-3593

National Center for Health Statistics, U.S.  
Dept. of Health and Human Services,  
6525 Belcrest Road, Room 1064,  
Hyattsville, MD 20782. Scientific and  
Technical Information Branch: 301-436-  
8500

National Institutes of Health, U.S. Dept. of  
Health and Human Services, 9000  
Rockville Pike, Bethesda, MD 20892.  
Information/ Publications: 301-496-4461

Office of the Surgeon General, U.S. Dept. of  
Health and Human Services, 200 Inde-  
pendence Avenue, S.W., Washington,  
DC 20201. Information: 202-245-7163

Public Health Service,\* Office of the Assis-  
tant Secretary for Health, U.S. Dept. of  
Health and Human Services, 200 Inde-  
pendence Avenue, S.W., Washington,  
DC 20201. Office of Communications:  
202-245-6867

Social Security Administration, U.S. Dept. of  
Health and Human Services, Office of  
Research and Statistics, Publications  
Room 209, 4301 Connecticut Avenue,  
N.W., Washington, DC 20008. Informa-  
tion/ Publications: 202-282-7138

## Housing

Assistant Secretary for Community Plan-  
ning/ Development, U.S. Dept. of Housing  
and Urban Development, 451 7th  
Street, S.W., Washington, DC 20410.  
Information: 202-708-2690

Assistant Secretary for Housing, U.S. Dept.  
of Housing and Urban Development,  
451 7th Street, S.W., Washington, DC  
20410. Information: 202-708-3600,  
Housing Information and Statistics:  
202-708-2190

## Immigration

Immigration and Naturalization Service, U.S.  
Department of Justice, 425 I Street,  
N.W., Room 268, Washington, DC  
20536. Statistics Office: 202-376-3069

## Income and Taxation

Internal Revenue Service, Statistics of  
Income Division, U.S. Dept. of Treas-  
ury, P.O. Box 2608, Washington, DC  
20013. Statistical Information Services:  
202-874-0410

Office of the Secretary, Public Affairs Office,  
U.S. Dept. of the Treasury, Room 2315,  
15th Street and Pennsylvania N.W.,  
Washington, DC 20220. Information:  
202-566-2041

Office of Tax Analysis, U.S. Dept. of the Treasury, Room 4040, 15th Street and Pennsylvania Avenue, N.W., Washington, DC 20220. Information: 202-566-5374. Publications: 202-566-5282

### **International**

United Nations, D.C. 2 1628, Statistical Office, United Nations, New York, NY 10017. Information: 212-963-1234

### **Labor and Employment**

Bureau of Labor Statistics,\* U.S. Dept. of Labor, 441 G Street, NW, Washington, DC 20212. Public Information Office: 202-523-1221.

Employment and Training Administration, U.S. Dept. of Labor, 200 Constitution Avenue, N.W., Room S2322, Washington, DC 20210. Information/ Publications: 202-523-6871

### **Miscellaneous**

Commission on Civil Rights, 1121 Vermont Avenue, N.W., Washington, DC 20425. Publications: 202-376-8105

Executive Office of the President, Office of Management and Budget, Old Executive Office Building, Washington, DC 20503. Information: 202-395-3000. Public Affairs: 202-395-3080. Publications: 202-395-7332

National Archives and Records Administration, Center for Electronic Records, 7th and Pennsylvania Avenue, N.W., Washington, DC 20408. Information: 202-501-5579

National Technical Information Service, U.S. Dept. of Commerce, 5285 Port Royal Road, Springfield, VA 22161. Information/ Orders: 703-487-4650

### **Science and Technology**

Energy Information Administration,\* National Energy Information Center, Room 1F048, U.S. Dept. of Energy, 1000 Independence Avenue, S.W., Washington, DC 20585. General Information: 202-586-8800

National Oceanic and Atmospheric Administration, Office of Public Affairs, U.S. Dept. of Commerce, 14th and Constitution Avenue, N.W., Washington, DC 20230. Public Affairs: 202-377-8090. Educational Inquiries: 301-443-8031

National Science Foundation, Office of Legislative and Public Affairs, 1800 G Street, N.W., Washington, DC 20550. Information: 202-357-9498

Office of Public Information, Bureau of Mines, U.S. Dept. of the Interior, 2401 E Street, N.W., Washington, DC 20241. Information: 202-501-9649

U.S. Geological Survey, U.S. Dept. of the Interior, 507 National Center, Reston,

VA 22092. Earth Science Information Center and Publications: 703-648-6892

### **Transportation**

Federal Highway Administration, U.S. Dept. of Transportation, 400 7th Street, S.W., Room 4210, Washington, DC 20590. Public Affairs: 202-366-0660

National Highway Traffic Safety Administration, U.S. Dept. of Transportation, 400 7th Street, S.W., Room 5232, Washington, DC 20590. Public Affairs: 202-366-9550. Publications: 202-366-2587

Urban Mass Transportation Administration, U.S. Dept. of Transportation, 400 7th Street, S.W., Room 9400, Washington, DC 20590. Public Affairs: 202-366-4043. Publications: 202-366-9157

### **Veterans**

Department of Veterans Affairs, Office of Planning, 810 Vermont Avenue, N.W., Room 962, Washington, DC 20420. Information: 202-535-8415

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