

1990 Census of Population and Housing Summary File 420 Place of Work, 20 Destinations File Technical Documentation

D1-D90-S420-14-TECH

Note: This technical documentation was issued at same time as the corresponding data file and does not necessarily reflect changes to the data file that may have been made later. We offer it as a service to our customers who have purchased the file, but we do not in general offer technical support for past data files. Note that although the documentation may refer to data on tape, the U.S. Census Bureau no longer releases data on magnetic tape; customers purchasing files previously released on tape will receive the file in ASCII on CD-ROM. For information about this and other technical documentation, please contact the Customer Services Center at 301-763-INFO (4636).

Additionally, Census Bureau organization, telephone numbers, and staff cited in this technical documentation are not current. For updated information, see our Telephone Contacts site at <http://www.census.gov/contacts/www/contacts.html> or Staff Search at <http://www.census.gov/cgi-bin/main/email.cgi>.

U.S. Census Bureau
Marketing Services
Office

USCENSUSBUREAU
Helping You Make Informed Decisions • 1902-2002

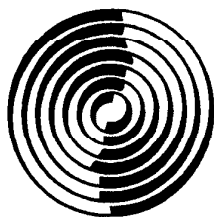
U.S. Department of
Commerce
Economic and Statistics
Administration
U.S. Census Bureau



U.S. Department of Commerce
Economic and Statistics Administration
BUREAU OF THE CENSUS

1990 Census of
Population and Housing

CENSUS '90



Summary Tape File 420

Place of Work 20 Destinations File

TECHNICAL
DOCUMENTATION
TECHNICAL
DOCUMENTATION
TECHNICAL
DOCUMENTATION

ACKNOWLEDGMENTS

The Decennial Planning Division, **Susan M. Miskura**, Chief, coordinated and directed all census operations. **Patricia A. Berman**, Assistant Division Chief for Content and Data Products, directed the development and implementation of the 1990 Census Tabulation and Publication Program. Other assistant division chiefs were **Robert R. Bair**, **Rachel F. Brown**, **James L. Dinwiddie**, **Allan A. Stephenson**, and **Edwin B. Wagner, Jr.** The following branch chiefs made significant contributions: **Cheryl R. Landman**, **Adolfo L. Paez**, **A. Edward Pike**, and **William A. Starr**. Other important contributors were **Linda S. Brudvig**, **Cindy S. Easton**, **Avis L. Foote**, **Carolyn R. Hay**, **Douglas M. Lee**, **Gloria J. Porter**, and **A. Nishea Quash**.

The Decennial Operations Division, **Arnold A. Jackson**, Chief, was responsible for processing and tabulating census data. Assistant division chiefs were: **Donald R. Dalzell**, **Kenneth A. Riccini**, **Billy E. Stark**, and **James E. Steed**. Processing offices were managed by **Alfred Cruz, Jr.**, **Earle B. Knapp, Jr.**, **Judith N. Petty**, **Mark M. Taylor**, **Russell L. Valentine, Jr.**, **Carol A. Van Horn**, and **C. Kemble Worley**. The following branch chiefs made significant contributions: **Jonathan G. Ankers**, **Sharron S. Baucom**, **Catharine W. Burt**, **Vickie L. Cotton**, **Robert J. Hemmig**, **George H. McLaughlin**, **Carol M. Miller**, **Lorraine D. Neece**, **Peggy S. Payne**, **William L. Peil**, **Cotty A. Smith**, **Dennis W. Stouidt**, and **Richard R. Warren**. Other important contributors were **Eleanor I. Banks**, **Miriam R. Barton**, **Danny L. Burkhead**, **J. Kenneth Butler, Jr.**, **Albert A. Csekar**, **Donald H. Danbury**, **Judith A. Dawson**, **Donald R. Dwyer**, **Beverly B. Fransen**, **Katherine H. Gilbert**, **Lynn A. Hollabaugh**, **Ellen B. Katzoff**, **Randy M. Klear**, **Norman W. Larsen**, **Peter J. Long**, **Sue Love**, **Patricia O. Madison**, **Mark J. Matsko**, **John R. Murphy**, **Dan E. Philipp**, **Eugene M. Rashlich**, **Willie T. Robertson**, **Barbara A. Rosen**, **Sharon A. Schoch**, **Imelda B. Severdia**, **Diane J. Simmons**, **Emmett F. Spliers**, **Johanne M. Stovall**, **M. Lisa Sylla**, and **Jess D. Thompson**.

The Housing and Household Economic Statistics Division, **Daniel H. Weinberg**, Chief, developed the questionnaire content, designed the data tabulations, and reviewed the data for the economic and housing characteristics. **Gordon W. Green, Jr.**, Assistant Division Chief for Economic Characteristics, and **Leonard J. Norry**, Assistant Division Chief for Housing Characteristics, directed the development of this work. The following branch chiefs made significant contributions: **William A. Downs**, **Peter J. Fronczek**, **Patricia A. Johnson**, **Enrique J. Lamas**, **Charles T. Nelson**, and **Thomas S. Scopp**. Other important contributors were **Eleanor F. Baugher**, **Jeanne C. Benetti**, **Robert L. Bennefield**, **Robert W. Bonnette**, **William S. Chapin**, **Higinio Feliciano**, **Timothy S. Grall**, **Cynthia J. Harpine**, **Selwyn Jones**, **Mary C. Kirk**, **Richard G. Kreinsen**, **Gordon H. Lester**, **Mark S. Liltman**, **Wilfred T. Masumura**, **John M. McNeil**, **Diane C. Murphy**, **George F. Patterson**, **Thomas J. Pakumbo**, **Kirby G. Posey**, **John Priebe**, **Anne D. Smoler**, and **Carmina F. Young**.

The Population Division, **Paula J. Schneider**, Chief, developed the questionnaire content, designed the data tabulations, and reviewed the data for the demographic and social characteristics of the population. **Philip N. Fulton**, Assistant Division Chief for Census Programs, directed the development of this work. Other assistant division chiefs were **Nampee R. McKenney** and **Arthur J. Norton**. The following branch and staff chiefs made significant contributions: **Jorge H. del Pinal**, **Campbell J. Gibson**, **Roderick J. Harrison**, **Donald J. Hernandez**, **Jane H. Ingold**, **Martin T. O'Connell**, **Marie Pees**, **J. Gregory Robinson**, **Phillip A. Salopek**, **Paul M. Siegel**, **Robert C. Speaker**, **Gregory K. Spencer**, and **Cynthia M. Taeuber**. Other important contributors were **Celia G. Boertlein**, **Rosalind R. Bruno**, **Janice A. Costanzo**, **Rosemarie C. Cowan**, **Arthur R. Cresce**, **Larry G. Curran**, **Carmen DeNavas**, **Robert O. Grymes**, **Kristin A. Hansen**, **Mary C. Hawkins**, **Rodger V. Johnson**, **Michael J. Levin**, **Edna L. Paisano**, **Sherry B. Pollock**, **Stanley J. Rolark**, **A. Dianne Schmidley**, **Denise I. Smith**, and **Nancy L. Sweet**.

The Data User Services Division, **Gerard C. Iannelli**, then Chief, directed the development of data product dissemination and information to increase awareness, understanding, and use of census data. **Marie G. Argana**, Assistant Chief for Data User Services, directed preparation of electronic data products and their dissemination. **Alfonso E. Mirabal**, Assistant Chief for Group Information and Advisory Services, directed activities related to the National Services Program, State Data Centers, and preparation of training materials. The following branch chiefs made significant contributions: **Deborah D. Barrett**, **Frederick G. Bohme**, **Larry W. Carbaugh**, **James P. Curry**, **Samuel**

H. Johnson, **John C. Kavalunas**, and **Forrest B. Williams**. Other important contributors were **Molly Abramowitz**, **Celestin J. Aguigu**, **Barbara J. Aldrich**, **Delores A. Baldwin**, **Albert R. Barros**, **Geneva A. Burns**, **Carmen D. Campbell**, **James R. Clark**, **Virginia L. Collins**, **George H. Dailey, Jr.**, **Barbara L. Hatchel**, **Theresa C. Johnson**, **Paul T. Manka**, **John D. McCall**, **Jo Ann Norris**, **David M. Pemberton**, **Sarabeth Rodriguez**, **Charles J. Wade**, **Joyce J. Ware**, and **Gary M. Young**.

The Geography Division, **Robert W. Marx**, Chief, directed and coordinated the census mapping and geographic activities. **Jack R. George**, Assistant Division Chief for Geoprocessing, directed the planning and development of the TIGER System and related software. **Robert A. LaMacchia**, Assistant Division Chief for Planning, directed the planning and implementation of processes for defining 1990 census geographic areas. **Silla G. Tomas**, Assistant Division Chief for Operations, managed the planning and implementation of 1990 census mapping applications using the TIGER System. The following branch chiefs made significant contributions: **Frederick R. Broome**, **Charles E. Dingman**, **Linda M. Franz**, **David E. Galdi**, **Dan N. Harding**, **Donald I. Hirschfeld**, **David B. Meixler**, **Peter Rosenson**, **Joel Sobel**, **Brian Swanhart**, and **Richard Trois**. Other important contributors were **Gerard Boudriauff**, **Desmond J. Carron**, **Anthony W. Costanzo**, **Paul W. Daisey**, **Beverly A. Davis**, **Carl S. Hartman**, **Christine J. Kinnear**, **Terence D. McDowell**, **Linda M. Pike**, **Rose J. A. Quarato**, **Lourdes Ramirez**, **Gavin H. Shaw**, **Daniel L. Sweeney**, **Timothy F. Trainor**, **Phyllis S. Willette**, and **Walter E. Yergen**.

The Statistical Support Division, **John H. Thompson**, Chief, directed the application of mathematical statistical techniques in the design and conduct of the census. **John S. Linebarger**, Assistant Division Chief for Quality Assurance, directed the development and implementation of operational and software quality assurance. **Henry F. Woltman**, Assistant Division Chief for Census Design, directed the development and implementation of sample design, disclosure avoidance, weighting, and variance estimation. **Howard Hogan** and **David V. Bateman** were contributing assistant division chiefs. The following branch chiefs made significant contributions: **Florence H. Abramson**, **Deborah H. Griffin**, **Richard A. Griffin**, **Lawrence I. Iskow**, and **Michael L. Mersch**. Other important contributors were **Linda A. Flores-Baez**, **Larry M. Bates**, **Somonica L. Green**, **James E. Hartman**, **Steven D. Jarvis**, **Alfredo Navarro**, **Eric L. Schindler**, **Carolyn T. Swan**, and **Glenn D. White**.

The 1990 Census Redistricting Data Office, **Marshall L. Turner, Jr.**, Chief, assisted by **Cathy L. Talbert**, directed the development and implementation of the 1990 Census Redistricting Data Program.

The Administrative and Publications Services Division, **Walter C. Odom**, Chief, provided direction for the census administrative services, publications, printing, and graphics functions. **Michael G. Garland** was a contributing assistant division chief. The following branch and staff chiefs made significant contributions: **Bernard E. Baymiller**, **Albert W. Cosner**, **Gary J. Lauffer**, **Gerald A. Manza**, **Clement B. Nettles**, **Russell Price**, and **Barbara J. Stanard**. Other important contributors were **Barbara M. Abbott**, **Robert J. Brown**, **David M. Coontz**, and **John T. Overby**.

The Data Preparation Division, **Joseph S. Harris**, Chief, provided management of a multi-operational facility including kit preparation, procurement, warehousing and supply, and census processing activities. **Plummer Alston, Jr.**, and **Patricia M. Clark** were assistant division chiefs.

The Field Division, **Stanley D. Matchett**, Chief, directed the census data collection and associated field operations. **Richard L. Bitzer**, **Richard F. Blass**, **Karl K. Kindel**, and **John W. Marshall** were assistant division chiefs. Regional office directors were **William F. Adams**, **John E. Bell**, **LaVerne Collins**, **Dwight P. Dean**, **Arthur G. Dukakis**, **Sheila H. Grimm**, **William F. Hill**, **James F. Holmes**, **Stanley D. Moore**, **Marvin L. Postma**, **John E. Reeder**, and **Leo C. Schilling**.

The Personnel Division, **David P. Warner**, Chief, provided management direction and guidance to the staffing, planning pay systems, and employee relations programs for the census. **Colleen A. Woodward** was the assistant chief.

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

1990 Census of
Population and Housing

Summary
Tape File 420
Place of Work
20 Destinations File

TECHNICAL
DOCUMENTATION

Issued April 1993



U.S. Department of Commerce
Ronald H. Brown, Secretary
John Rollwagen, Deputy Secretary

Economics and Statistics Administration
Jeffrey Mayer, Acting Under Secretary
for Economic Affairs

BUREAU OF THE CENSUS
Harry A. Scarr, Acting Director



**Economics and Statistics
Administration**

Jeffrey Mayer, Acting Under Secretary
for Economic Affairs



BUREAU OF THE CENSUS

Harry A. Scarr, Acting Director

Charles D. Jones, Associate Director for
Decennial Census

William P. Butz, Associate Director for
Demographic Programs

Bryant Benton, Associate Director for Field
Operations

Bryant Benton, Acting Associate Director for
Management Services

Peter A. Bounpane, Assistant Director for
Decennial Census

SPECIAL ACKNOWLEDGMENTS

Significant contributions to the preparation of the Place of Work 20 Destinations File were made by **Gloria A Swieczkowski**, **Edward J. Yanek**, **Carol S. Faber**, and **I. Bernice Savoy** in Population Division and **Imelda B. Severdia** and **Beverly B. Fransen** in Decennial Management Division.

The files should be cited as follows:

Census of Population and Housing, 1990: Summary Tape File 420, Place of Work 20 Destinations [machine-readable data files] / prepared by the Bureau of the Census. —Washington: The Bureau [producer and distributor], 1993.

The technical documentation should be cited as follows:

Census of Population and Housing, 1990: Summary Tape File 420, Place of Work 20 Destinations Technical Documentation / prepared by the Bureau of the Census. —Washington: The Bureau, 1993.

For additional information concerning the files, contact Data User Services Division, Customer Services Branch, Bureau of the Census, Washington, DC 20233. Telephone: 301-763-4100.

For additional information concerning the technical documentation, contact Data User Services Division, Data Access and Use Staff, Bureau of the Census, Washington, DC 20233. Telephone: 301-763-2074.

CONTENTS

	Page
Abstract	1-1
How to Use This File	2-1
Subject Locator	3-1
List of Tables (Matrices)	4-1
Table (Matrix) Outlines	5-1
Summary Level Sequence Charts	6-1
User Notes	7-1

Data Dictionary	1
-----------------------	---

APPENDICES

A. Area Classifications	A-1
B. Definitions of Subject Characteristics	B-1
C. Accuracy of the Data	C-1
D. Collection and Processing Procedures	D-1
E. Facsimiles of Respondent Instructions and Questionnaire Pages	E-1
F. Data Products and User Assistance	F-1
G. Maps	G-1
H. Record Layout of Machine-Readable Data Dictionary	H-1
I. Code List	I-1

ABSTRACT

The user should note that there are limitations to many of these data. Please refer to the technical documentation provided with Summary Tape File 420 for a further explanation on the limitations of the data.

CONTENTS

Census Divisions	1-4
Citation	1-1
File Availability	1-3
Geographic Coverage	1-1
Related Machine-Readable Data Files	1-3
Related Products	1-2
Related Reference Materials	1-2
Subject Matter Description	1-1
Technical Description	1-3
Type of File	1-1
Universe Description	1-1

CITATION

Census of Population and Housing, 1990: Summary Tape File 420, Place of Work 20 Destinations File [machine-readable data files] / prepared by the Bureau of the Census. —Washington: The Bureau [producer and distributor], 1993.

TYPE OF FILE

Summary statistics.

UNIVERSE DESCRIPTION

All persons and housing units in the United States.

SUBJECT MATTER DESCRIPTION

Summary Tape File 420 (STF 420) contains sample data weighted to represent the total population of workers 16 years and over as well as 100-percent counts of all persons and housing units. It includes five population tables and one housing table. For workers 16 years and over, data for 20 places of work and for those working elsewhere are provided for the total, five race groups (White; Black; American Indian, Eskimo, or Aleut; Asian or Pacific Islander; other race) and Hispanic origin by race.

In addition to the data file of six tables, each tape will include a machine-readable list of the total number of workers living in each county and, for that county, the number of persons working in the 20 destinations listed as well as a "worked elsewhere" category for the remainder of places worked.

GEOGRAPHIC COVERAGE

This abstract lists only the most frequently accessed geographic levels. The Summary Level Sequence Chart chapter outlines the hierarchy and inventory summaries in their entirety.

STF 420 provides data for States and their subareas in hierarchical sequence down to the census tract/block numbering area (BNA) level. Summary levels for place of residence of workers provide data for MSA's and PMSA's (only the State part in crossover MA's), counties, minor civil divisions (12 States only), places with 10,000 or more persons, and census tracts/block numbering areas.

A list of 20 place of work destinations is defined for each residence county (MCD in New England). The list also applies to the sub-county geographic residences (places, census tracts/BNA's) and contains a variety of geographic entities as destinations. A destination may be a county, place, balance of county, Metropolitan Area, or balance of a Metropolitan Area. The number of place of work destinations shown for Metropolitan Statistical Area (MSA) and Primary Metropolitan Statistical Area (PMSA) summary levels is limited to the number of destinations in common among the counties comprising the area, and may be less than 20.

For the following geographic entities, the geographic codes will be shown for the specific summary level, but the data fields will be filled with spaces. Those areas affected are: Consolidated Metropolitan Statistical Areas (or CMSA remainder); the nonmetropolitan remainder of county areas in 6 New England States; certain census tracts/BNA's in the nonmetropolitan remainder of county areas in 6 New England States; and in the county portion of American Indian Reservations and Trust Lands in 6 New England States.

The hierarchy of the file within State is:

Metropolitan Statistical Area/Consolidated
Metropolitan Statistical Area (or MSA/CMSA part)
County
Place with 10,000 or more persons (or place
part)
Census Tract/Block Numbering Area
American Indian Reservation
American Indian Trust Lands

Inventory (complete) summaries are available for the following:

County
MSA/PMSA
County Subdivision
Consolidated City

RELATED PRODUCTS

1990 CPH-L-115, *Twenty Place of Work Destinations*. This listing provides the total number of workers living in each county in the United States and, for that county, the number of persons working in the 20 places listed as well as a "worked elsewhere" category for the remainder of places worked. This publication will be available after all State files are released. For pricing information, contact Customer Services, Data User Services Division, Bureau of the Census, Washington, DC 20233. Phone: 301-763-4100. FAX: 301-763-4794.

Listed below are the 1990 census printed reports containing sample data from STF 3 and STF 4. These reports will be available from Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. An order form follows this abstract.

1990 CPH-3, *Population and Housing Characteristics for Census Tracts and Block Numbering Areas*. One report will be published for each metropolitan area (MA) and one for the non-metropolitan balance of each State, Puerto Rico and the U.S. Virgin Islands showing data for most of the population and housing subjects included in the 1990 census. Some tables will be based on the 100-percent tabulations, others on the sample tabulations. Scheduled for release in 1993.

1990 CPH-4, *Population and Housing Characteristics for Congressional Districts of the 103rd Congress*. A report for each State and the District of Columbia which provides both 100-percent and sample data for States, congressional districts and, within congressional districts, counties, places of 10,000 or more inhabitants, county subdivisions of 10,000 or more inhabitants in 12 States, and American Indian and Alaska Native areas. All States are available.

1990 CPH-5, *Summary Social, Economic, and Housing Characteristics*. These reports, issued for the United States, States, District of Columbia, Puerto Rico, and the U.S. Virgin Islands, provide sample population and housing data for States and local governmental units (i.e., counties, places, towns, and townships), other county subdivisions, and American Indian and Alaska Native areas. All States are available.

1990 CP-2, *Social and Economic Characteristics*. These reports are issued for the United States, States, District of Columbia, Puerto Rico, and the U.S. Virgin Islands. They focus on the population subjects collected on a sample basis in 1990. Data are shown for 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 each State portion of American Indian areas. Scheduled for release in 1993.

1990 CP-2-1A, *Social and Economic Characteristics for American Indian and Alaska Native Areas*. Data are shown for American Indian and Alaska Native areas. Scheduled for release in 1993.

1990 CP-2-1B, *Social and Economic Characteristics for Metropolitan Areas*. Data are shown for MA's. Scheduled for release in 1993.

1990 CP-2-1C, *Social and Economic Characteristics for Urbanized Areas*. Data are shown for urbanized areas (UA's). Scheduled for release in 1993.

1990 CP-3, *Population Subject Reports*. Various reports are planned covering population subjects and subgroups. These include migration, income, and the older population. Geographic areas generally will include the United States, regions, and divisions; some reports may include data for highly populated areas, such as States, MA's, counties and large places. Scheduled for release in 1993.

1990 CH-2, *Detailed Housing Characteristics*. These reports, issued for the United States, States, District of Columbia, Puerto Rico, and the U.S. Virgin Islands, focus on the housing subjects collected on a sample basis in 1990. Data are shown for 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. Scheduled for release in 1993.

1990 CH-2-1A, *Detailed Housing Characteristics for American Indian and Alaska Native Areas*. Data are shown for American Indian and Alaska Native areas. Scheduled for release in 1993.

1990 CH-2-1B, *Detailed Housing Characteristics for Metropolitan Areas*. Data are shown for MA's. Scheduled for release in 1993.

1990 CH-2-1C, *Detailed Housing Characteristics for Urbanized Areas*. Data are shown for UA's. Scheduled for release in 1993.

1990 CH-3, *Housing Subject Reports*. Housing subject reports are planned covering 1990 census items. Geographic areas generally include the United States, regions, and divisions; some reports may include data for other highly populated geographic areas such as States, MA's, counties, and large places. Scheduled for release in 1993.

RELATED REFERENCE MATERIALS

1990 *Census of Population and Housing Tabulation and Publication Program*. This booklet provides descriptions of data products available from the 1990 census. Available without charge from Customer Services, Data User Services Division, Bureau of the Census, Washington, DC 20233. Phone: 301-763-4100. FAX: 301-763-4794.

Census '90 Basics. This booklet provides a general overview of the census activity and detailed information on census content, geographic areas, and products. Available without charge from Customer Services (see above).

Census ABC's—Applications in Business and Community. This booklet highlights key information about the 1990 census and illustrates a variety of ways the data can be used. Available without charge from Customer Services (see above).

1990 CPH-R-1A, 1990 Census of Population and Housing Guide, Part A. Text. This provides detailed information about all aspects of the census. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. GPO S/N 003-024-08574-7. Price: \$11.

1990 CPH-R-1B, 1990 Census of Population and Housing Guide, Part B, Glossary. This is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. GPO S/N 003-024-08679-4. Price: \$5.50. Part C, Index, provides an index of Summary Tape Files 1-4 and will be available in the summer of 1993.

RELATED MACHINE-READABLE DATA FILES

Census of Population and Housing, 1990: Summary Tape File 4. It contains sample data for population and housing items by detailed race and Hispanic origin categories. In addition, the file contains 100-percent counts and unweighted sample counts for total persons and total housing units. STF 4 has three files showing different geographic coverage—4A, 4B, and 4C—and each file has data in A records (limited race categories) and B records (more detailed race categories). For

more information, refer to the STF 4 technical documentation. For ordering information, contact Customer Services (see above).

Census of Population and Housing, 1990: Summary Tape File S-5, Number of Workers by County of Residence by County of Work. This is a national county-to-county commuting file with the entire United States on one tape. Characteristics, such as race and Hispanic origin, of the commuters are not included in the data; only the number of workers who live in each county and work in every other county. This file is available from Customer Services (see above).

TECHNICAL DESCRIPTION

STF 420 records have 3,351 characters in one segment. The first 300 characters of the segment contain geographic information.

FILE AVAILABILITY

There will be one STF 420 file available for each State and for the District of Columbia. These files will be sold by census divisions as listed on the following page. Pricing information is available from Customer Services, Data User Services Division, Bureau of the Census, Washington, DC 20233. Phone: 301-763-4100. FAX: 301-763-4794. A machine-readable data dictionary is included on the tape without charge. Options include 6250 bpi, ASCII or EBCDIC, labeled or unlabeled. The files are also available on IBM 3480 compatible tape cartridges for the same price. A copy of the technical documentation is included with each order. When ordered separately, the cost is \$10. Please use the order form at the end of this chapter when placing an order.

CENSUS DIVISIONS

The nine geographic census divisions have been largely unchanged for the presentation of summary statistics since the 1910 census. These divisions con-

sist of groups of States that appear in four regions: Northeast, Midwest, West, and South.

NORTHEAST REGION

New England Division

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

Middle Atlantic Division

New Jersey
New York
Pennsylvania

MIDWEST REGION

East North Central Division

Illinois
Indiana
Michigan
Ohio
Wisconsin

West North Central Division

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

WEST REGION

Mountain Division

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

Pacific Division

Alaska
California
Hawaii
Oregon
Washington

SOUTH REGION

East South Central Division

**Alabama
Kentucky
Mississippi
Tennessee**

West South Central Division

**Arkansas
Louisiana
Oklahoma
Texas**

South Atlantic Division

**Delaware
District of Columbia
Florida
Georgia
Maryland
North Carolina
South Carolina
Virginia
West Virginia**

Census Bureau Order Forms

*0001

PUBLICATIONS — *Use only if not in stock at the Government Printing Office (GPO).*

Please Type or Print. (Form is aligned for typewriter use.) Prices include regular domestic postage and handling. International customers please add 25%.

[illegible]

(Company or personal name) (Please type or print)

(Additional address/attention line)

(Street address)

(City, State, ZIP Code)

(Daytime phone including area code)

(Date)

Please Choose Method of Payment:☐ Check payable to Superintendent of Documents

Mail To: Bureau of the Census, DPD—Publications
Unit, 1201 E. Tenth St., Jeffersonville, IN 47132

☐ **GPO deposit account**

**Mail To: Customer Services, Bureau of the Census,
Washington, DC 20233 [or call (301)763-4100;
fax (301)763-4794]**

*0002

ELECTRONIC MEDIA, MICROFICHE, DOCUMENTATION, AND OTHER - Use for computer tape (TAPE), computer tape cartridge (CART), technical documentation (TD), compact disc—read-only memory (CD-ROM), diskette (DISK), microfiche (FICHE), or paper reproductions - "blowbacks" (BB).

Please Type or Print. (Form is aligned for typewriter use.) All prices include regular domestic postage and handling. International customers, please add 25%.

Qty.	Media (See abbrev. above)	Title	Price each	Total price
Total for products listed (minimum order: \$10)				

COMPUTER TAPE INSTRUCTIONS

Characteristics of 9-Track Tape Reels:

☐ 6250 bpi, EBCDIC ☐ 1600 bpi, EBCDIC☐ 6250 bpi, ASCII ☐ 1600 bpi, ASCII

Labeling: ☐ Standard ☐ Unlabeled

Maximum block size (if less than 32K bytes)?

Characteristics of IBM 3840-Compatible Tape Cartridges:

Language: ☐ EBCDIC ☐ ASCII

Labeling: ☐ Standard ☐ Unlabeled

Maximum block size (if less than 32K bytes)?

(Company or personal name) (Please type or print)

(Additional address/attention line)

(Street address)

(City, State, ZIP Code)

(Daytime phone including area code)

(Date)

Please Choose Method of Payment:☐ Check payable to Commerce-Census☐ **Census deposit account**☐ **VISA or MasterCard Account**

(Name on card)

Expiration date

(Signature)

Mail to: Customer Services, Bureau of the Census, Washington, DC 20233; (301) 763-4100.
To fax your orders and inquiries—(301) 763-4794

HOW TO USE THIS FILE

CONTENTS

Introduction	2-1
Using the file	2-2

INTRODUCTION

This chapter serves as a guide for data users to both the tape and the technical documentation. Novice users trying to understand how to use the documentation and the file should read this chapter first.

Documentation Chapters

The Abstract chapter in this documentation provides a quick overview of the file, including the formal title, geographic coverage, subject coverage, and file availability. Also shown are citations for related reference materials and printed reports. Their titles and geography are included in this section, along with purchasing information.

The Subject Locator is an aid to finding which tables provide the information needed. The List of Tables (Matrices) and the Table (Matrix) Outlines provide two types of presentations for the tables available in the file. The List of Tables (Matrices) has the table titles and universes.

The Table (Matrix) Outlines offer a detailed presentation of the tables. When reviewing the tables, remember that a colon(:) following an entry indicates the entry is a heading, not a data cell.

User Notes

Information about file or documentation changes sometimes becomes available after the documentation has been printed. User notes inform the user community about these changes. These are issued in a numbered series. If there are technical documentation changes, revised pages usually accompany them. The revised pages should be inserted in their proper location, but the user note cover sheet should be filed in the User Notes chapter. Technical notes, which contain file errata, are also issued by the Census Bureau. We suggest filing these following appendix I.

Data Dictionary

The data dictionary describes the file and provides character locations for each variable and each table. It

has two elements, the identification section and the table (matrix) section.

In the identification section, the components include the field name; the data dictionary reference name, a short mnemonic for use with software packages; field size; starting position; and data type (alphabetic, numeric, or alphanumeric).

The identification section of the data dictionary is identical for all summary tape files. It provides a list of the geographic codes or refers the user to the appropriate source. Review the footnotes carefully; they provide explanations for various terms. These footnotes are listed at the end of the identification section of the data dictionary.

The table (matrix) section provides information on the table (matrix) number; table (matrix) description; number of implied decimals in each cell (if not 0); starting position within the record, within the segment, and for all cells within the first-level variable; and cell coordinates.

There also is a machine-readable data dictionary file on the data tape. This dictionary is designed to be converted for use with various software packages.

Appendixes

Detailed information on geographic areas is in appendix A followed by subject-matter definitions in appendix B. Appendix C provides detailed statistical information about the data while appendix D outlines the data collection and procedures. Facsimiles of both the respondent instructions and 1990 census long-form questionnaire are in appendix E.

Appendix F furnishes detailed information on all the data products of the 1990 census, as well as suggested sources of information and assistance. Map information is included in appendix G. The record layout for the machine-readable data dictionary file that accompanies each tape order is in appendix H.

Appendix I contains the code lists used in processing the data.

Count Corrections

The Census Bureau issues population count corrections on an occasional basis. Count corrections for geography at the place level and above are available from Customer Services, Data User Services Division, Bureau of the Census, Washington, DC 20233. Phone: 301-763-4100. FAX: 301-763-4794. Count corrections for geography at the census tract/BNA level or below

are available from Population Division, Bureau of the Census, Washington, DC 20233. When requesting these corrections, please include the desired census tract/BNA, block group, or block numbers.

USING THE FILE

Internal File Labels

System Labels—Tape orders which specify labeled tapes will have a standard American National Standards Institute (ANSI) label. The system label consists of 17 characters. The 1990 STF 420 file has a Data Set Name (DSN) of SP420Xss.Fnnxxxxx where "ss" is the United States Postal Service (USPS) State abbreviation, and "nn" is a two-digit number with leading zeros identifying the tape volume sequence. The "X", "F", and the last five "x's" in the DSN remain constant.

Also included on the tape are the Computer Referenceable Data Dictionary and the Place of Work Supplement. This supplement lists all twenty place of work destinations for each county in each State in the United States. The DSN's are SP42CRDD.Fnnxxxxx and SP420POW.Fnnxxxxx, respectively.

User Labels—Each user tape will have six user header labels and six user trailer labels. These labels combine information from the system label and the identification portion of the first and last record. These labels enable the user to quickly identify the beginning and ending records on each tape.

User Header Labels—The user header labels are designated UHL1 through UHL6. UHL1 and UHL2 repeat information from the system label in HDR1 and HDR2. (See the State-specific File Information section.) UHL3 and UHL4 contain information from the identification portion of the first record on the tape. UHL5 and UHL6 contain a statement regarding the data limitations.

User Trailer Labels—The user trailer labels are designated UTL1 through UTL6. UTL1 and UTL2 contain information from the system trailer label. UTL3 and subsequent user trailer labels contain identification information from the last record on the tape. The unused portion of UTL6 is blank filled.

State-Specific File Information

State-specific file information, such as record counts, is not provided in the technical documentation. However, each tape order is accompanied by a tape creation sheet. This sheet provides the file name, file label (HDR1), the third user header label (UHL3), record size, block size, and record count. The third user header label for each reel identifies the geography for the first record on the reel. For example, the UHL3 at the beginning of each reel of a three-reel file for a State provides

the geography for the first record. If the geography needed is on reel three, only reel three needs to be processed.

The tape creation sheet received with the tape should be filed in the technical documentation notebook or with other tape information maintained by the user.

Record Segmentation

Each logical record for STF 420 has one segment of 3,351 characters. The first 300 characters of the segment contain geographic identification information followed by 5 population tables and one housing table. The machine-readable data dictionary, which accompanies the STF 420 file, provides complete information on these tables. No filler characters appear in the record.

Summary Level Sequence Chart and Geographic Area Component Codes

The Summary Level Sequence Chart chapter and the geographic area component codes provide important information for using the 1990 census summary tape files. The Summary Level Sequence Chart chapter for the STF 420 file identifies the geographic levels for which data are provided. It is easy to determine this if you remember that the last geographic area type listed in the sequence identifies the geography of the summary level; the prior areas simply define the hierarchy.

For example, in summary level 141, the hierarchy listed is State—Metropolitan Statistical Area/Consolidated Metropolitan Statistical Area/Remainder—Primary Metropolitan Statistical Area/Remainder—County—Census Tract/Block Numbering Area (BNA). The record actually contains data for a census tract/BNA within a given county, metropolitan area, and State.

When reading the Summary Level Sequence Chart chapter, it is important to recognize that dashes (—) separate the individual hierarchies while slashes (/) separate different types of geography within the same hierarchy. For example, State—county—census tract/BNA identifies a record hierarchy for a census tract or BNA within a county within a State. After identifying the summary level code, turn to chart 1 at the end of this chapter to determine the geographic area codes and area characteristics provided on the tape for this summary level. Remember that an asterisk (*) indicates a code in that field. When retrieving data from STF 420 file, it is necessary to check the summary level (beginning in position 11 of the data dictionary).

The Summary Level Sequence Chart chapter also provides geographic component code information. This code identifies the various geographic components for which the record is repeated within the summary level. These component codes are provided in the identification section of the data dictionary beginning in position 14.

For STF 420 the only geographic component code used is "00." This means that data are available for the total area of each summary level listed.

Record Identification

Each record on a summary tape file is uniquely identified by a combination of the geographic code (for example, State, Metropolitan Statistical Area (MSA)/Consolidated Metropolitan Statistical Area (CMSA)) and summary level code. For example if you have a North Carolina STF 420 file and want to look at the summary record for the Asheville MSA, two fields must be checked: the summary level code (in position 11 of the geographic identification section) for MSA records (320) and the MSA code (in position 106 of the geographic identification section) for the Asheville MSA (0480). If both fields are not checked, multiple records will be found.

Special Area Codes

Special area codes appear in the geographic area codes portion of the data dictionary (positions 142-171) on all STF's. The codes represented may vary across STF's. Special area code (9) is used in all summary levels on the STF 420 file. The nine codes for special area code (9) are described below. Special area code (9) is used in all levels.

Special area code (9) Land/water area

- | | |
|---|--|
| 1 | Significant land, significant (0.0005 or more square kilometers) water |
| 2 | Significant land, minimal (less than 0.0005 square kilometer) water |
| 3 | Significant land, zero (0) water |
| 4 | Minimal land, significant water |
| 5 | Minimal land, minimal water |
| 6 | Minimal land, zero water |
| 7 | Zero land, significant water |
| 8 | Zero land, minimal water |
| 9 | Zero land, zero water |

Special area code (10) is used for STF 420 and appears in summary level 141 (census tract/Block

Numbering Area) records. This code indicates whether the census tract/BNA is split.

Special area code (10) Split tract

- | | |
|---|--|
| 1 | Tract is split between places [10,000 or more persons] or is inside and outside a place [10,000 or more persons] |
| 2 | Tract is not split by place(s) [10,000 or more persons] |

Standard Codes

In the identification section of all STF's, there are standard codes, undefined in the data dictionary, that have identical meaning regardless of the field. The codes are the same size as the field; that is, a three-character field will have three symbols. These standard codes are listed below.

- | | |
|-------|--|
| ! | Not available—The codes would be shown except it had not been determined when the files were prepared (for example, metropolitan area code on a county summary level (050) on STF 1A). |
| 9 | Not in—This indicates a "remainder of" an area, such as a place code in the portion of a county subdivision not in a place, or the summary level is not part of any area to which the code field applies, such as a summary level which is not in an Alaska Native Regional Corporation. |
| Blank | Not applicable—This indicates that the code is not applicable to the summary level. |

Where these codes are specifically defined in the data dictionary, the defined code should be used. For example, in the division code description on the data dictionary (position 89), the code for the Pacific Division is indicated as "9." This "9" should be interpreted as the division code, not as "not in," the standard code for "9."

Chart 1. STF 420 File Identification by Summary Level¹

Field name	Summary level 069	Summary level 120	Summary level 130	Summary level 141	Summary level 170	Summary level 220	Summary level 221	Summary level 320	Summary level 321	Summary level 330	Summary level 331
Record Codes											
File Identification	*	*	*	*	*	*	*	*	*	*	*
State/US-Abbreviation	*	*	*	*	*	*	*	*	*	*	*
Summary Level	*	*	*	*	*	*	*	*	*	*	*
Geographic Component	*	*	*	*	*	*	*	*	*	*	*
Characteristic Iteration	*	*	*	*	*	*	*	*	*	*	*
Logical Record Number	*	*	*	*	*	*	*	*	*	*	*
Logical Record Part Number	*	*	*	*	*	*	*	*	*	*	*
Total Number of Parts In Record	*	*	*	*	*	*	*	*	*	*	*
Geographic Area Codes											
Alaska Native Regional Corporation											
American Indian/Alaska Native Area (Census)						*	*				
American Indian/Alaska Native Area (FIPS)						*	*				
American Indian/Alaska Native Area Class Code						*	*				
American Indian Reservation Trust Land Indicator						*	*				
Block											
Block Group											
Census Tract/Block Numbering Area			*	*							
Congressional District											
Consolidated City (Census)		*	*		*						
Consolidated City (FIPS)		*	*		*						
Consolidated City Class Code		*	*		*						
Consolidated City Size Code		*	*		*						
Consolidated Metropolitan Statistical Area	*	*	*	*	*			*	*		*
County	*	*	*	*	*	*	*			*	*
County Size Code	*	*	*	*	*	*	*			*	*
County Subdivision (Census)	*										
County Subdivision (FIPS)	*										
County Subdivision Class Code	*										
County Subdivision Size Code	*										
Division	*	*	*	*	*	*	*	*	*	*	*
Extended City Indicator		*	*								
Internal Use Code											
Metropolitan Statistical Area/Consolidated Metropolitan Area	*	*	*	*	*			*	*	*	*

¹See the Summary Level Sequence Chart chapter for identification of the summary level record numbers.

Chart 1. **STF 420 File Identification by Summary Level¹-Con.**

Field name	Summary level 009	Summary level 120	Summary level 130	Summary level 141	Summary level 170	Summary level 220	Summary level 221	Summary level 320	Summary level 321	Summary level 330	Summary level 331
Geographic Area Codes-Con.											
MSA/CMSA Size Code	*	*	*	*	*			*	*	*	*
Place (Census)		*	*								
Place (FIPS)		*	*								
Place Class Code		*	*								
Place Description Code		*	*								
Place Size Code		*	*								
Primary Metropolitan Statistical Area	*	*	*	*	*				*		*
Region	*	*	*	*	*	*	*	*	*	*	*
State (Census)	*	*	*	*	*	*	*	*	*	*	*
State (FIPS)	*	*	*	*	*	*	*	*	*	*	*
Urban/Rural											
Urbanized Area											
Urbanized Area Size Code											
Special Area Code (1)											
Special Area Code (2)											
Special Area Code (3)											
Special Area Code (4)											
Special Area Code (5)											
Special Area Code (6)											
Special Area Code (7)											
Special Area Code (8)	*	*	*	*	*	*	*	*	*	*	*
Special Area Code (9)											
Special Area Code (10)				*							
Area Characteristics											
Area (Land)	*	*	*	*	*	*	*	*	*	*	*
Area (Water)	*	*	*	*	*	*	*	*	*	*	*
Area Name/PSAD Term/Part Indicator	*	*	*	*	*	*	*	*	*	*	*
Functional Status Code	*	*	*	*	*	*	*	*	*	*	*
Geographic Change User Note Indicator	*	*			*	*		*	*	*	*
Housing Unit Count (100 percent)	*	*	*	*	*	*	*	*	*	*	*
Internal Point (Latitude)	*	*	*	*	*	*	*	*	*	*	*
Internal Point (Longitude)	*	*	*	*	*	*	*	*	*	*	*
Part Flag		*	*					*	*	*	*
Political/Statistical Area Description Code	*	*			*	*	*	*	*	*	*
Population Count (100 percent)	*	*	*	*	*	*	*	*	*	*	*
Special Flag	*	*	*	*	*	*	*	*	*	*	*

¹See the Summary Level Sequence Chart chapter for identification of the summary level record numbers.

SUBJECT LOCATOR

CONTENTS

Index	3-1
Introduction	3-1

INTRODUCTION

This Index is designed to quickly identify the STF 420 tables needed. Each table variable is listed alphabetically. Both the type of entry being tabulated (universe), which is shown in *italics*, and the relevant table numbers appear under the variable heading. If the entry variable is cross tabulated by another variable, the variable of cross tabulation is indicated beneath the universe and is preceded by the word "by." The index entries for each variable are arranged alphabetically by universe, then by variable of cross tabulation, if any.

For example, if you are looking for data for place of work by Hispanic origin by race, check the index under any of the three variables. Checking under place of work, you find entries for three tables. Checking table P5, you can see that place of work is cross tabulated by Hispanic origin by race. All tables have a universe of workers 16 years and over except the 100-percent count of housing units and persons.

INDEX

100-Percent count of Housing Units	
<i>Housing units</i>	H1
100-Percent Count of Persons	
<i>Persons</i>	P1
Hispanic Origin	
<i>Workers 16 years and over</i>	
by Race by place of Work	P5
Place of Work	
<i>Workers 16 years and over</i>	P3
by Hispanic Origin by Race	P5
by Race	P4
Race	
<i>Workers 16 years and over</i>	
by Hispanic Origin by Place of Work	P5
by Place of Work	P4
Workers	
<i>Workers 16 years and over</i>	P2

LIST OF TABLES (MATRICES)

Table (matrix)	Title	Total number of data cells
P1.	100-PERCENT COUNT OF PERSONS(1) <i>Universe: Persons</i>	1
P2.	WORKERS(1)..... <i>Universe: Workers 16 years and over</i>	1
P3.	PLACE OF WORK(21)..... <i>Universe: Workers 16 years and over</i>	21
P4.	RACE(5) BY PLACE OF WORK(21)..... <i>Universe: Workers 16 years and over</i>	105
P5.	HISPANIC ORIGIN(2) BY RACE(5) BY PLACE OF WORK(21) <i>Universe: Workers 16 years and over</i>	210
H1.	100-PERCENT COUNT OF HOUSING UNITS(1)..... <i>Universe: Housing units</i>	1

TABLE MATRIX OUTLINES

Table (matrix)	Title	Total number of data cells
P1.	100-PERCENT COUNT OF PERSONS(1) <i>Universe: Persons</i> Total	1
P2.	WORKERS(1)..... <i>Universe: Workers 16 years and over</i> Total	1
P3.	PLACE OF WORK(21) <i>Universe: Workers 16 years and over</i> Work place 1 Work place 2 Work place 3 Work place 4 Work place 5 Work place 6 Work place 7 Work place 8 Work place 9 Work place 10 Work place 11 Work place 12 Work place 13 Work place 14 Work place 15 Work place 16 Work place 17 Work place 18 Work place 19 Work place 20 Worked elsewhere	21
P4.	RACE(5) BY PLACE OF WORK(21)..... <i>Universe: Workers 16 years and over</i> White: Work place 1 Work place 2 Work place 3 Work place 4 Work place 5 Work place 6 Work place 7 Work place 8 Work place 9 Work place 10 Work place 11 Work place 12 Work place 13 Work place 14 Work place 15 Work place 16 Work place 17 Work place 18 Work place 19 Work place 20 Worked elsewhere	105

Table (matrix)	Title	Total number of data cells
P4.	RACE(5) BY PLACE OF WORK(21)—Con. Black: (Repeat PLACE OF WORK) American Indian, Eskimo, or Aleut: (Repeat PLACE OF WORK) Asian or Pacific Islander: (Repeat PLACE OF WORK) Other race: (Repeat PLACE OF WORK)	
P5.	HISPANIC ORIGIN(2) BY RACE(5) BY PLACE OF WORK(21) Universe: <i>Workers 16 years and over</i> Not of Hispanic origin: White: Work place 1 Work place 2 Work place 3 Work place 4 Work place 5 Work place 6 Work place 7 Work place 8 Work place 9 Work place 10 Work place 11 Work place 12 Work place 13 Work place 14 Work place 15 Work place 16 Work place 17 Work place 18 Work place 19 Work place 20 Worked elsewhere Black: (Repeat PLACE OF WORK) American Indian, Eskimo, or Aleut: (Repeat PLACE OF WORK) Asian or Pacific Islander: (Repeat PLACE OF WORK) Other race: (Repeat PLACE OF WORK) Hispanic origin: (Repeat RACE By PLACE OF WORK)	210
H1.	100-PERCENT COUNT OF HOUSING UNITS(1)..... Universe: <i>Housing units</i> Total	1

SUMMARY LEVEL SEQUENCE CHART

Summary level area	Summary level code	Geographic component code
State—Metropolitan Statistical Area ¹ /Consolidated Metropolitan Statistical Area ² /Remainder ³	320	00
Metropolitan Statistical Area/Remainder [no CMSAs]—State—County ⁴	330	00
State—Metropolitan Statistical Area/Consolidated Metropolitan Statistical Area/Remainder—Primary Metropolitan Statistical Area/Remainder—County—Place [10,000 or more persons]/Remainder ⁴	120	00
State—Metropolitan Statistical Area/Consolidated Metropolitan Statistical Area/Remainder—Primary Metropolitan Statistical Area/Remainder—County—Place [10,000 or more persons]/Remainder—Census Tract/Block Numbering Area ⁵	130	00
State—Metropolitan Statistical Area/Consolidated Metropolitan Statistical Area/Remainder—Primary Metropolitan Statistical Area/Remainder—County—Census Tract/Block Numbering Area ⁵	141	00
State—Consolidated Metropolitan Statistical Area—Primary Metropolitan Statistical Area ¹	321	00
Consolidated Metropolitan Statistical Area—Primary Metropolitan Statistical Area—State—County	331	00
State—Metropolitan Statistical Area/Consolidated Metropolitan Statistical Area/Remainder—Primary Metropolitan Statistical Area/Remainder—County—Place [10,000 or more persons]/Remainder ⁴	120	00
State—Metropolitan Statistical Area/Consolidated Metropolitan Statistical Area/Remainder—Primary Metropolitan Statistical Area/Remainder—County—Place [10,000 or more persons]/Remainder—Census Tract/Block Numbering Area ⁵	130	00
State—Metropolitan Statistical Area/Consolidated Metropolitan Statistical Area/Remainder—Primary Metropolitan Statistical Area/Remainder—County—Census Tract/Block Numbering Area ⁵	141	00
State [12 States only—CT, ME, MA, MI, MN, NH, NJ, NY, PA, RI, VT, WI]—County Subdivision	069	00
State—Consolidated City	170	00
American Indian Reservation [reservation with or without trust lands; reservation only]/Tribal Jurisdiction Statistical Area/Tribal Designated Statistical Area/Alaska Native Village Statistical Area—State—County ⁶	220	00
American Indian Trust Lands [trust lands with or without reservations; trust lands only]—State—County ⁶	221	00

¹Variable number of destinations are shown for MSAs, PMSAs.

²Blank for CMSAs. Geographic codes are shown for this summary level, but data fields filled with spaces.

³Blank for remainder of State areas. Geographic codes are shown for this summary level, but data fields filled with spaces.

⁴Blank for nonmetropolitan remainder of county areas in 6 New England States. Geographic codes are shown for this summary level, but data fields filled with spaces.

⁵Blank for certain census tracts/BNAs in nonmetropolitan remainder of county areas in 6 New England States. Geographic codes are shown for this summary level, but data fields filled with spaces.

⁶Blank in 6 New England States. Geographic codes are shown for this summary level, but data fields filled with spaces.

USER NOTES

User notes supply file purchasers with additional or corrected information which becomes available after the technical documentation or files are prepared. They are issued in a numbered series and automatically mailed to all users who purchase technical documentation from the Census Bureau. Other users may obtain them by subscribing to the user note series. Contact Customer Services (301-763-4100) for subscription information.

Each user note has a cover sheet which should be filed following this page. Technical documentation replacement pages will follow the cover sheet. These pages need to be filed in their proper location and the original pages destroyed. Replacement pages can be readily identified, since they have the user note date on the lower outside portion of each page.



UNITED STATES DEPARTMENT OF COMMERCE
Bureau of the Census
Washington, DC 20233-0001

**CENSUS OF POPULATION AND HOUSING, 1990:
SUMMARY TAPE FILE 420
PLACE OF WORK 20 DESTINATIONS**

USER NOTE 1

Age Reporting—Review of detailed 1990 information indicated that respondents tended to provide their age as of the date of completion of the questionnaire, not their age as of April 1, 1990. In addition, there may have been a tendency for respondents to round up their age if they were close to having a birthday. It is likely that approximately 10 percent of persons in most age groups are actually 1 year younger. For most single years of age, the misstatements are largely offsetting. The problem is most pronounced at age 0 because persons lost to age 1 may not have been fully offset by the inclusion of babies born after April 1, 1990 and because

there may have been more rounding up to age 1 to avoid reporting age as 0 years. (Age in completed months was not collected for infants under age 1.)

The reporting of age 1 year older than age on April 1, 1990 is likely to have been greater in areas where the census data were collected later in 1990. The magnitude of this problem was much less in the three previous censuses where age was typically derived from respondent data on year of birth and quarter of birth. (For more information on the design of the age question, see the discussion on comparability under "Age" in appendix B.)

November 1992



UNITED STATES DEPARTMENT OF COMMERCE
Bureau of the Census
Washington, DC 20233-0001

**CENSUS OF POPULATION AND HOUSING, 1990:
SUMMARY TAPE FILE 420
PLACE OF WORK 20 DESTINATIONS**

USER NOTE 2

No data are shown for the following nonmetropolitan census tracts because these tracts are located in more than one minor civil division (MCD), and the MCD's involved do not use the same 20 places of work list:

MAINE

Aroostook County: 9501, 9502, 9508, 9510, 9517,
9522, 9523, 9526, 9528, 9529
Franklin County: 9904, 9905, 9909, 9910
Hancock County: 9651, 9652, 9657, 9665
Kennebec County: 0109, 0205
Lincoln County: 9753, 9754, 9755
Oxford County: 9952, 9954, 9958, 9959, 9960,
9967, 9968.98
Penobscot County: 0080.02, 0215, 0235, 0245,
0255. 0265
Piscataquis County: 9602, 9603, 9604, 9608
Sagadahoc County: 9802
Somerset County: 9853, 9854, 9856, 9857, 9861,
9862, 9863, 9870
Waldo County: 0450, 0460, 0470
Washington County: 9551, 9552, 9553, 9558, 9559,
9560, 9562

MASSACHUSETTS

Franklin County: 0401, 0402, 0404, 0406, 0415

NEW HAMPSHIRE

Belknap County: 9653
Cheshire County: 9704, 9707
Coos County: 9502, 9503, 9504, 9509, 9510
Grafton County: 9603, 9604, 9605, 9608, 9609,
9612
Hillsborough County: 0220, 0255
Sullivan County: 9752, 9755

VERMONT

Addison County: 9604, 9606, 9609
Bennington County: 9706
Caledonia County: 9570, 9571, 9579
Essex County: 9501, 9503
Franklin County: 0101
Orange County: 9591, 9595
Orleans County: 9516, 9517, 9519
Rutland County: 9621, 9628, 9635, 9642
Washington County: 9541
Windham County: 9672
Windsor County: 9654, 9659, 9662

April 1993



UNITED STATES DEPARTMENT OF COMMERCE
Bureau of the Census
Washington, DC 20233-0001

**CENSUS OF POPULATION AND HOUSING, 1990:
SUMMARY TAPE FILE 420
PLACE OF WORK 20 DESTINATIONS**

USER NOTE 3

BALTIMORE, MD MSA: The central city of Annapolis was inadvertently omitted from the list of 20 place-of-work destinations. Workers commuting into Annapolis are included in the total for Anne Arundel County, but the city does not appear as a separate entity on the 20 places list.

Data that show the commuter flows into Annapolis may be produced at a later date. For more information about the availability of these data, contact the Journey-to-Work and Migration Statistics Branch, Population Division, Bureau of the Census, Washington, DC 20233. Phone: 301-763-3850.

BRIDGEPORT-MILFORD, CT PMSA: The central city of Milford (remainder) was inadvertently omitted from the list of 20 place-of-work destinations. Workers commuting into Milford city (remainder) are included in the total for Milford town, but the city does not appear as a separate entity on the 20 places list.

Data that show the commuter flows into Milford city (remainder) may be produced at a later date. For more information about the availability of data for Milford city (remainder), contact the Journey-to-Work and Migration Statistics Branch, Population Division, Bureau of the Census, Washington, DC 20233. Phone: 301-763-3850.

CHICAGO, IL PMSA: The central cities of Chicago Heights, Elgin (pt.), and Aurora (pt.) were inadvertently omitted from the list of 20 place-of-work destinations. Workers commuting into Chicago Heights and Elgin (pt.) are included in the remainder of Cook County, and workers commuting into Aurora (pt.) are included in the remainder of Du Page County. The cities do not appear as separate entities on the 20 places list.

Data that show the commuter flows into the affected central cities may be produced at a later date. For more information about the availability of these data for these

central cities, contact the Journey-to-Work and Migration Statistics Branch, Population Division, Bureau of the Census, Washington, DC 20233. Phone: 301-763-3850.

KANSAS CITY, MO-KS MSA: The central city of Leavenworth was inadvertently omitted from the list of 20 place-of-work destinations. Workers commuting into Leavenworth are included in the total for Leavenworth County, but the city does not appear as a separate entity on the 20 places list.

Data that show the commuter flows into Leavenworth may be produced at a later date. For more information about the availability of these data, contact the Journey-to-Work and Migration Statistics Branch, Population Division, Bureau of the Census, Washington, DC 20233. Phone: 301-763-3850.

OAKLAND, CA PMSA: The central city of Livermore was inadvertently omitted from the list of 20 place-of-work destinations. Workers commuting into Livermore are included in the remainder of Alameda County, but the city does not appear as a separate entity on the 20 places list.

Data that show the commuter flows into Livermore may be produced at a later date. For more information about the availability of these data, contact the Journey-to-Work and Migration Statistics Branch, Population Division, Bureau of the Census, Washington, DC 20233. Phone: 301-763-3850.

PHILADELPHIA, PA-NJ PMSA: The central city of Norristown was inadvertently omitted from the list of 20 place-of-work destinations. Workers commuting into Norristown are included in the remainder of Montgomery County, but the city does not appear as a separate entity on the 20 places list.

Essex County should be shown as Essex County (pt.).

MSA Name	FIPS MSA	FIPS STATE	FIPS COUNTY
Remainder	9999	25	009

RHODE ISLAND (44)

Kent County should be shown as Kent County (pt.).

MSA Name	FIPS MSA	FIPS STATE	FIPS COUNTY
Remainder	9999	44	003

Newport County should be shown as Newport County (pt.).

MSA Name	FIPS MSA	FIPS STATE	FIPS COUNTY
Remainder	9999	44	005

April 1993



UNITED STATES DEPARTMENT OF COMMERCE
Bureau of the Census
Washington, DC 20233-0001

CENSUS OF POPULATION AND HOUSING, 1990:
SUMMARY TAPE FILE 420
PLACE OF WORK 20 DESTINATIONS

USER NOTE 5

Appendix G. The latitude and longitude values shown by tick marks in the margins of the County Subdivision Outline Maps in appendix G are approximate. They are

shown only for general reference. They are displayed accurately on the State and County Outline Maps.

April 1993

USER NOTE ORDERING INFORMATION

Additional information concerning this file may be available at a later date. If you receive this technical documentation (with or without tape purchase) from the Census Bureau and wish to receive these user notes, please complete the coupon below and return it to:

Data User Services Division
Customer Services Branch
Bureau of the Census
Washington, DC 20233

.....

Name of File: **Census of Population and Housing, 1990: Summary Tape File 420—Place of Work 20 Destinations**

Please send me any information that becomes available later concerning the file listed above.

Name:

Address:

City and State:

ZIP Code:

DATA DICTIONARY

CONTENTS

Identification Section	1
Table (Matrix) Section	13

IDENTIFICATION SECTION

Field name	Data dictionary reference name	Field size	Starting position	Data type
------------	--------------------------------	------------	-------------------	-----------

Record Codes

File Identification ¹FILEID 8 1 A/N

State/US AbbreviationSTUSAB 2 9 A

AK	Alaska	ID	Idaho	NC	North Carolina	SC	South Carolina
AL	Alabama	IL	Illinois	ND	North Dakota	SD	South Dakota
AR	Arkansas	IN	Indiana	NE	Nebraska	TN	Tennessee
AZ	Arizona	KS	Kansas	NH	New Hampshire	TX	Texas
CA	California	KY	Kentucky	NJ	New Jersey	UC	United States
CO	Colorado	LA	Louisiana	NM	New Mexico	UT	Utah
CT	Connecticut	MA	Massachusetts	NV	Nevada	VA	Virginia
DC	District of Columbia	MD	Maryland	NY	New York	VI	Virgin Islands of the United States
DE	Delaware	ME	Maine	OH	Ohio	VT	Vermont
FL	Florida	MI	Michigan	OK	Oklahoma	WA	Washington
GA	Georgia	MN	Minnesota	OR	Oregon	WI	Wisconsin
HI	Hawaii	MO	Missouri	PA	Pennsylvania	WV	West Virginia
IA	Iowa	MS	Mississippi	PR	Puerto Rico	WY	Wyoming
		MT	Montana	RI	Rhode Island		

Summary Level ²SUMLEV 3 11 N

Geographic Component ³GEOCOMP 2 14 N

00	Not a geographic component
01	Urban
02	Urban—in urbanized area
03	Urban—in urbanized area—in urbanized area central place
04	Urban—in urbanized area—not in urbanized area central place
05	Urban—not in urbanized area
06	Urban—not in urbanized area—place [10,000 or more persons]
07	Urban—not in urbanized area—place [2,500 to 9,999 persons]
08	Rural
09	Rural—place [1,000 to 2,499 population, not in an extended city]
10	Rural—place [0 to 999 population, not in an extended city]
11	Rural—not in place [or rural part of extended city]
12	Rural—farm
13	Urban portion of extended city
14	Rural portion of extended city
20	In metropolitan statistical area/consolidated metropolitan statistical area
21	In metropolitan statistical area/consolidated metropolitan statistical area—urban
22	In metropolitan statistical area/consolidated metropolitan statistical area—rural

NOTE: See footnotes at the end of this section.

IDENTIFICATION SECTION—Con.

Field name	Data dictionary reference name	Field size	Starting position	Data type
------------	--------------------------------	------------	-------------------	-----------

23	In metropolitan statistical area/consolidated metropolitan statistical area—in metropolitan statistical area/primary metropolitan statistical area central city
24	In metropolitan statistical area/consolidated metropolitan statistical area—not in metropolitan statistical area/primary metropolitan statistical area central city
25	In metropolitan statistical area/consolidated metropolitan statistical area—not in metropolitan statistical area/primary metropolitan statistical area central city—urban
26	In metropolitan statistical area/consolidated metropolitan statistical area—not in metropolitan statistical area/primary metropolitan statistical area central city—urban—in urbanized area
27	In metropolitan statistical area/consolidated metropolitan statistical area—not in metropolitan statistical area/primary metropolitan statistical area central city—urban—not in urbanized area
28	In metropolitan statistical area/consolidated metropolitan statistical area—not in metropolitan statistical area/primary metropolitan statistical area central city—rural
30	Not in metropolitan statistical area/consolidated metropolitan statistical area
31	Not in metropolitan statistical area/consolidated metropolitan statistical area—urban
32	Not in metropolitan statistical area/consolidated metropolitan statistical area—urban—in urbanized area
33	Not in metropolitan statistical area/consolidated metropolitan statistical area—urban—not in urbanized area
34	Not in metropolitan statistical area/consolidated metropolitan statistical area—urban—not in urbanized area—place [10,000 or more population]
35	Not in metropolitan statistical area/consolidated metropolitan statistical area—urban—not in urbanized area—place [2,500 - 9,999 population]
36	Not in metropolitan statistical area/consolidated metropolitan statistical area—rural
40	American Indian reservation and trust land [American Indian reservations (AIR codes 0001-4989) including any trust lands]
42	Tribal Jurisdiction Statistical Area [Oklahoma only]
43	Tribal Designated Statistical Area
44	Alaska Native village statistical area [Alaska only]

Characteristic Iteration * CHARITER 3 16 N

000 Not a characteristic iteration

Logical Record Number ⁵ LOGRECNU 6 19 N

Logical Record Part Number ⁶ LOGRECPN 4 25 N

Total Number of Parts in Record ⁷ PARTREC 4 29 N

Geographic Area Codes

Alaska Native Regional Corporation ⁸ ANRC 2 33 A/N

07 Ahtna	28 Bering Straits	49 Chugach	70 Koniag
14 Aleut	35 Bristol Bay	56 Cook Inlet	77 NANA
21 Arctic Slope	42 Calista	63 Doyon	84 Sealaska

American Indian/Alaska Native Area (Census) ⁹ AIANACE 4 35 A/N

American Indian/Alaska Native Area (FIPS) ¹⁰ AIANAFP 5 39 A/N

American Indian/Alaska Native Area Class Code AIANACC 2 44 A/N

D1	Federally recognized American Indian reservation that does not serve as a minor civil division (MCD) equivalent
D2	Federally recognized American Indian reservation that also serves as an MCD equivalent
D3	American Indian tribal government that holds property in trust—"trust land"—for a tribe or individual member(s) of the tribe, and the trust land(s) is not associated with a specific American Indian reservation or the associated American Indian reservation is not located in this State
D4	State-recognized American Indian reservation that does not serve as an MCD equivalent
D5	State-recognized American Indian reservation that also serves as an MCD equivalent

NOTE: See footnotes at the end of this section.

IDENTIFICATION SECTION—Con.

Field name	Data dictionary reference name	Field size	Starting position	Data type
<div> D6 Tribal designated statistical area (TDSA); tribal jurisdiction statistical area (TJSA) (TJSAs occur only in Oklahoma) E1 Alaska Native village statistical area (ANVSA) that does not coincide with or approximate an incorporated place or a census designated place (CDP) E2 ANVSA that coincides with or approximates a CDP E6 ANVSA that coincides with or approximates an incorporated place </div>				
American Indian Reservation Trust Land Indicator Code.....	ARTLI	1	46	A/N
<div> 1 American Indian reservation; including Tribal Jurisdiction Statistical Area (TJSA) and Tribal Designated Statistical Area (TDSA) 2 Off-reservation trust land 9 Not an American Indian area </div>				
Block ⁸	BLCK	4	47	A/N
Block Group ⁸	BLCKGR	1	51	A/N
Census Tract/Block Numbering Area ⁸	TRACTBNA	6	52	A/N
Congressional District (101st Congress) ⁸	CONGDIS	2	58	A/N
<div> 01-45 The actual congressional district number 00 Applies to States whose representative is elected "at large"; i.e., the State has only one representative in the United States House of Representatives 98 Applies to areas that have a nonvoting delegate in the United States House of Representatives 99 Applies to areas that have no representation in the United States House of Representatives </div>				
Consolidated City (Census) ⁸	CONCITCE	1	60	A/N
<div> B Butte-Silver Bow, Montana C Columbus, Georgia I Indianapolis, Indiana J Jacksonville, Florida M Milford, Connecticut N Nashville-Davidson, Tennessee </div>				
Consolidated City (FIPS) ^{8,10}	CONCITFP	5	61	A/N
Consolidated City Class Code ¹⁰	CONCITCC	2	66	A/N
<div> C3 Consolidated city </div>				
Consolidated City Population Size Code.....	CONCITSC	2	68	A/N
<div> 00 Not in universe 01 0 02 1-24 03 25-99 04 100-199 05 200-249 06 250-299 07 300-499 08 500-999 09 1,000-1,499 10 1,500-1,999 11 2,000-2,499 12 2,500-4,999 13 5,000-9,999 14 10,000-19,999 15 20,000-24,999 16 25,000-49,999 17 50,000-99,999 18 100,000-249,999 19 250,000-499,999 20 500,000-999,999 21 1,000,000-2,499,999 22 2,500,000-4,999,999 23 5,000,000 or more </div>				
Consolidated Metropolitan Statistical Area ⁹	CMSA	2	70	A/N
County ⁹	CNTY	3	72	A/N

NOTE: See footnotes at the end of this section.

DATA DICTIONARY

IDENTIFICATION SECTION—Con.

Field name	Data dictionary reference name	Field size	Starting position	Data type
County Population Size Code.....	CNTYSC	2	75	A/N

00 Not in universe	06 250-299	12 2,500-4,999	18 100,000-249,999
01 0	07 300-499	13 5,000-9,999	19 250,000-499,999
02 1-24	08 500-999	14 10,000-19,999	20 500,000-999,999
03 25-99	09 1,000-1,499	15 20,000-24,999	21 1,000,000-2,499,999
04 100-199	10 1,500-1,999	16 25,000-49,999	22 2,500,000-4,999,999
05 200-249	11 2,000-2,499	17 50,000-99,999	23 5,000,000 or more

County Subdivision (Census) ⁹ COUSUBCE 3 77 A/N

County Subdivision (FIPS) ¹⁰ COUSUBFP 5 80 A/N

County Subdivision Class Code COUSUBCC 2 85 A/N

- C2 Incorporated place that also serves as a minor civil division (MCD) equivalent because, although the place is coextensive with an MCD, the Census Bureau, in agreement with State officials, does not recognize that MCD for presenting census data because the MCD cannot provide governmental services (Ohio only)
- C5 Incorporated place that also serves as an MCD equivalent because it is not part of an MCD or a county subdivision classified as Z5
- C7 Incorporated place that also serves as a county equivalent and an MCD equivalent; generally referred to as an "independent city"
- D2 Federally recognized American Indian reservation that also serves as an MCD equivalent
- D5 State-recognized American Indian reservation that also serves as an MCD equivalent
- T1 Governmentally active minor civil division (MCD) that is not coextensive with an incorporated place
- T5 Governmentally active MCD that is coextensive with an incorporated place
- Z1 MCD that is governmentally inactive or cannot provide general-purpose governmental services
- Z3 Unorganized territory identified by the Census Bureau as an MCD equivalent for presenting census data
- Z5 Census county division (CCD); census subarea (CSA) (Alaska only); census subdistrict (Virgin Islands only)
- Z7 Incorporated place that the Census Bureau treats as a minor civil division (MCD) equivalent because it is not in any MCD or is coextensive with a legally established but nonfunctioning MCD that the Census Bureau does not recognize for data presentation, AND is located in a State or county whose MCD's cannot provide governmental services (Iowa and Nebraska only)

County Subdivision Population Size Code COUSUBSC 2 87 A/N

00 Not in universe	06 250-299	12 2,500-4,999	18 100,000-249,999
01 0	07 300-499	13 5,000-9,999	19 250,000-499,999
02 1-24	08 500-999	14 10,000-19,999	20 500,000-999,999
03 25-99	09 1,000-1,499	15 20,000-24,999	21 1,000,000-2,499,999
04 100-199	10 1,500-1,999	16 25,000-49,999	22 2,500,000-4,999,999
05 200-249	11 2,000-2,499	17 50,000-99,999	23 5,000,000 or more

Division ⁸ DIVIS 1 89 A/N

0 Not in a division	4 West North Central	7 West South Central
1 New England	5 South Atlantic	8 Mountain
2 Middle Atlantic	6 East South Central	9 Pacific
3 East North Central		

Extended City Indicator ⁸ EXTCITIN 1 90 A/N

1 Extended city	9 Not an extended city
-----------------	------------------------

Internal Use Code ¹¹ INTUC 15 91 A/N

NOTE: See footnotes at the end of this section.

IDENTIFICATION SECTION—Con.

Field name	Data dictionary reference name	Field size	Starting position	Data type
------------	--------------------------------	------------	-------------------	-----------

Metropolitan Statistical Area/Consolidated Metropolitan

Statistical Area ⁹.....MSACMSA 4 106 A/N

MSA/CMSA Population Size CodeMSACMSAS 2 110 A/N

00 Not in universe	06 250-299	12 2,500-4,999	18 100,000-249,999
01 0	07 300-499	13 5,000-9,999	19 250,000-499,999
02 1-24	08 500-999	14 10,000-19,999	20 500,000-999,999
03 25-99	09 1,000-1,499	15 20,000-24,999	21 1,000,000-2,499,999
04 100-199	10 1,500-1,999	16 25,000-49,999	22 2,500,000-4,999,999
05 200-249	11 2,000-2,499	17 50,000-99,999	23 5,000,000 or more

Place (Census) ⁹.....PLACECE 4 112 A/N

Place (FIPS) ¹⁰.....PLACEFP 5 116 A/N

Place Class CodePLACECC 2 121 A/N

- C1 Incorporated place that is governmentally active, is not related to an Alaska Native village statistical area (ANVSA), and does not serve as a minor civil division (MCD) equivalent
- C2 Incorporated place that also serves as a minor civil division (MCD) equivalent because, although the place is coextensive with an MCD, the Census Bureau, in agreement with State officials, does not recognize that MCD for presenting census data because the MCD cannot provide governmental services (Iowa and Ohio only)
- C5 Incorporated place that also serves as an MCD equivalent because it is not part of an MCD
- C6 Incorporated place that coincides with or approximates an ANVSA
- C7 Incorporated place that also serves as a county equivalent; generally referred to as an "independent city"
- C8 The portion ("remainder") of a consolidated city that excludes the incorporated place(s) within that jurisdiction
- C9 Incorporated place whose government is operationally inactive and is not included in any other C subclass
- M2 Military or Coast Guard installation (or part of an installation) that serves as a census designated place (CDP)
- U1 CDP with a name that is commonly recognized for the populated area
- U2 CDP with a name that is not commonly recognized for the populated area (e.g., a combination of the names of two or three commonly recognized communities, or a name that identifies the location of the CDP in relation to an adjacent incorporated place)
- U9 CDP that coincides with or approximates an ANVSA.

Note: In Ohio, a multi-county place that has a different MCD relationship in each county is assigned only a single class code of C1, C2, or C5.

Place Description CodePLACEDC 1 123 A/N

- 1 Incorporated central city of a metropolitan statistical area/primary metropolitan statistical area (MSA/PMSA), but not a central place of an urbanized area (UA)
- 2 Incorporated central place of an urbanized area (UA), but not a central city of a metropolitan statistical area/primary metropolitan statistical area (MSA/PMSA)
- 3 Incorporated central city of a metropolitan statistical area/primary metropolitan statistical area (MSA/PMSA) and a central place of an urbanized area (UA)
- 4 Consolidated city or an incorporated place that is not a central city of a metropolitan statistical area/primary metropolitan statistical area (MSA/PMSA) and not a central place of an urbanized area (UA)
- 5 Incorporated place, which is the central place of an urbanized area (UA), but only part of which is the central city of a metropolitan statistical area/primary metropolitan statistical area (MSA/PMSA)
- 6 Incorporated place, which is not a central place of an urbanized area (UA), but part of which is the central city of a metropolitan statistical area/primary metropolitan statistical area (MSA/PMSA)
- A Census designated place (CDP) that is a central place of an urbanized area (UA), but not a central city of a metropolitan statistical area/primary metropolitan statistical area (MSA/PMSA)
- B Census designated place (CDP) that is a central city of a metropolitan statistical area/primary metropolitan statistical area (MSA/PMSA), but not a central place of an urbanized area (UA)
- C Census designated place (CDP) that is a central city of a metropolitan statistical area/primary metropolitan statistical area (MSA/PMSA) and a central place of an urbanized area (UA)

NOTE: See footnotes at the end of this section.

DATA DICTIONARY

IDENTIFICATION SECTION—Con.

Field name	Data dictionary reference name	Field size	Starting position	Data type
------------	--------------------------------	------------	-------------------	-----------

- D Census designated place (CDP) that is in a 1980 or special census urbanized area (UA) and is not a central city or a central place; these CDP's must have a 1990 population of at least 300 in Hawaii and the Virgin Islands of the United States, 1,000 in Puerto Rico, and 2,500 elsewhere
- E Census designated place (CDP) not classified elsewhere; these CDP's must meet the following minimum population requirements:
 - 300 in Hawaii and the Virgin Islands of the United States
 - 25 in Alaska
 - 1,000 in all other States and Puerto Rico
- F Zona urbana that is a central place of an urbanized area (UA) in Puerto Rico, but not a central city of a metropolitan statistical area/primary metropolitan statistical area (MSA/PMSA)
- G Zona urbana that is a central city of a metropolitan statistical area/primary metropolitan statistical area (MSA/PMSA) in Puerto Rico, but not a central place of an urbanized area (UA)
- H Zona urbana that is a central city of a metropolitan statistical area/primary metropolitan statistical area (MSA/PMSA) and a central place of an urbanized area (UA)
- I Zona urbana in Puerto Rico that is not a central city or a central place
- L Census designated place (CDP) entirely within an American Indian reservation and entirely outside of a 1980 or special census urbanized area (UA); these CDP's must have a 1990 population of at least 25 in Alaska and 250 elsewhere

Place Population Size Code PLACESC 2 124 A/N

00 Not in universe	06 250-299	12 2,500-4,999	18 100,000-249,999
01 0	07 300-499	13 5,000-9,999	19 250,000-499,999
02 1-24	08 500-999	14 10,000-19,999	20 500,000-999,999
03 25-99	09 1,000-1,499	15 20,000-24,999	21 1,000,000-2,499,999
04 100-199	10 1,500-1,999	16 25,000-49,999	22 2,500,000-4,999,999
05 200-249	11 2,000-2,499	17 50,000-99,999	23 5,000,000 or more

Primary Metropolitan Statistical Area ^a PMSA 4 126 A/N

Region ^a REG 1 130 A/N

1 Northeast	2 Midwest	3 South	4 West
-------------	-----------	---------	--------

State (Census) ^o STATECE 2 131 A/N

06 Puerto Rico	33 Illinois	54 Virginia	81 Montana
07 Virgin Islands of the United States	34 Michigan	55 West Virginia	82 Idaho
11 Maine	35 Wisconsin	56 North Carolina	83 Wyoming
12 New Hampshire	41 Minnesota	57 South Carolina	84 Colorado
13 Vermont	42 Iowa	58 Georgia	85 New Mexico
14 Massachusetts	43 Missouri	59 Florida	86 Arizona
15 Rhode Island	44 North Dakota	61 Kentucky	87 Utah
16 Connecticut	45 South Dakota	62 Tennessee	88 Nevada
21 New York	46 Nebraska	63 Alabama	91 Washington
22 New Jersey	47 Kansas	64 Mississippi	92 Oregon
23 Pennsylvania	51 Delaware	71 Arkansas	93 California
31 Ohio	52 Maryland	72 Louisiana	94 Alaska
32 Indiana	53 District of Columbia	73 Oklahoma	95 Hawaii
		74 Texas	

NOTE: See footnotes at the end of this section.

IDENTIFICATION SECTION—Con.

Field name	Data dictionary reference name	Field size	Starting position	Data type
------------	--------------------------------	------------	-------------------	-----------

State (FIPS) ⁸ STATEFP 2 133 A/N

01 Alabama	17 Illinois	31 Nebraska	46 South Dakota
02 Alaska	18 Indiana	32 Nevada	47 Tennessee
04 Arizona	19 Iowa	33 New Hampshire	48 Texas
05 Arkansas	20 Kansas	34 New Jersey	49 Utah
06 California	21 Kentucky	35 New Mexico	50 Vermont
08 Colorado	22 Louisiana	36 New York	51 Virginia
09 Connecticut	23 Maine	37 North Carolina	53 Washington
10 Delaware	24 Maryland	38 North Dakota	54 West Virginia
11 District of Columbia	25 Massachusetts	39 Ohio	55 Wisconsin
	26 Michigan	40 Oklahoma	56 Wyoming
12 Florida	27 Minnesota	41 Oregon	72 Puerto Rico
13 Georgia	28 Mississippi	42 Pennsylvania	78 Virgin Islands of the United States
15 Hawaii	29 Missouri	44 Rhode Island	
16 Idaho	30 Montana	45 South Carolina	

Urban/Rural ⁸ URBANRUR 1 135 A/N

1 Urban	2 Rural
---------	---------

Urbanized Area ⁹ URBAREA 4 136 A/N

Urbanized Area Population Size Code UASC 2 140 A/N

00 Not in universe	06 250-299	12 2,500-4,999	18 100,000-249,999
01 0	07 300-499	13 5,000-9,999	19 250,000-499,999
02 1-24	08 500-999	14 10,000-19,999	20 500,000-999,999
03 25-99	09 1,000-1,499	15 20,000-24,999	21 1,000,000-2,499,999
04 100-199	10 1,500-1,999	16 25,000-49,999	22 2,500,000-4,999,999
05 200-249	11 2,000-2,499	17 50,000-99,999	23 5,000,000 or more

Special Area Code (1) SAC1 5 142 A/N

Special Area Code (2) SAC2 5 147 A/N

Special Area Code (3) SAC3 4 152 A/N

Special Area Code (4) SAC4 4 156 A/N

Special Area Code (5) SAC5 3 160 A/N

Special Area Code (6) SAC6 3 163 A/N

Special Area Code (7) SAC7 2 166 A/N

Special Area Code (8) SAC8 2 168 A/N

Special Area Code (9) SAC9 1 170 A/N

Special Area Code (10) SAC10 1 171 A/N

Area Characteristics

Area (land) ¹² AREALAND 10 172 A/N

Area (water) ¹³ AREAWAT 10 182 A/N

Area Name/PSAD Term/Part Indicator ¹⁴ ANPSADPI 66 192 A/N

NOTE: See footnotes at the end of this section.

DATA DICTIONARY

IDENTIFICATION SECTION—Con.

Field name	Data dictionary reference name	Field size	Starting position	Data type
Functional Status Code.....	FUNCSTAT	1	258	A/N

- A Active governmental unit, except American Indian reservations and Alaska Native village statistical areas. — An active governmental unit has the legal capacity to have officers, to raise revenue, and to conduct governmental activities under State laws, and currently is doing so.
- B Functioning governmental unit providing no substantive governmental services. — These areas may be coextensive with and administered by officials of another governmental unit (such as towns in Connecticut that are coextensive with cities), or the number of officials and/or the functions they perform are so minimal and/or vestigial that the Census Bureau does not recognize them as governmental units for census purposes (such as townships in Iowa).
- F False entity. — In order to maintain complete coverage of every State at the county level and of every county at the county subdivision level, we create false entities at these levels for any place that is independent of a county or independent of a minor civil division (MCD). This code also is used for place records that represent the remainder of a consolidated city or the remainder of a county subdivision.
- I Inactive governmental unit. — An inactive governmental unit has the legal capacity to be active, but currently has no legal officers, raises no revenues, and conducts no activities.
- N Nonfunctioning governmental unit. — A nonfunctioning governmental unit has legally established boundaries, but has no legal capacity to conduct governmental activity.
- R An American Indian reservation, an American Indian tribe whose name is associated with trust lands, or an Alaska Native village statistical area.
- S Statistical entity, except Alaska Native village statistical areas and tribal jurisdiction statistical areas. — A statistical entity has no governmental status and is defined by or in cooperation with the Census Bureau or other Federal agency. This category includes census regions, census divisions, census county divisions (CCDs), census designated places (CDPs), metropolitan areas (MSA/CMSA/PMSAs), urbanized areas (UAs), unorganized territories (UTs), tribal designated statistical areas (TDSAs), census areas and census subareas in Alaska, and comunidades and zonas urbanas in Puerto Rico.
- T Tribal jurisdiction statistical area. — A tribal jurisdiction statistical area (TJSA) is not a legally defined governmental unit, but is recognized as a statistical area for the 1990 census. These areas exist only in the State of Oklahoma and were not recognized separately in 1980.

Geographic Change User Note Indicator.....	GCUNI	1	259	A/N
--	-------	---	-----	-----

- 0 No geographic change note for the area within the summary level
- 1 See User Notes for a geographic change note

Housing Unit Count (100 percent) ¹⁵	HU100	9	260	A/N
Internal Point (latitude) ¹⁶	INTPTLAT	9	269	A/N
Internal Point (longitude) ¹⁷	INTPTLNG	10	278	A/N
Part Flag.....	PARTFLAG	1	288	A/N

- 0 Not a part
- 1 Part

Political/Statistical Area Description Code.....	PSADC	2	289	A/N
--	-------	---	-----	-----

- 01 State or State equivalent—no status is appended to the name of the entity in census publications and related data products.
- 04 Borough—county equivalent in Alaska; "Borough" is appended to the name of the entity in census publications and related data products.
- 05 Census area—county equivalent in Alaska; "Census Area" is appended to the name of the entity in census publications and related data products.
- 06 County—"County" is appended to the name of the entity in census publications and related data products.
- 08 Independent city—county equivalent in Maryland, Missouri, and Virginia; "city" is appended to the name of the entity in census publications and related data products.
- 09 Independent city—county equivalent in Nevada; no status is appended to the name of the entity in census publications and related data products.

NOTE: See footnotes at the end of this section.

IDENTIFICATION SECTION—Con.

Field name	Data dictionary reference name	Field size	Starting position	Data type
10	Island—county equivalent in Virgin Islands of the United States; "Island" is appended to the name of the entity in census publications and related data products.			
13	Municipio—county equivalent in Puerto Rico; "Municipio" is appended to the name of the entity in census publications and related data products.			
14	(none)—county equivalent; used at county level for the District of Columbia and Yellowstone National Park (Montana). No status is appended to the name of the entity in census publications and related data products.			
15	Parish—county equivalent in Louisiana; "Parish" is appended to the name of the entity in census publications and related data products.			
19	American Indian reservation—minor civil division (MCD) in Maine and New York; "Reservation" is appended to the name of the entity in census publications and related data products.			
20	Barrio—minor civil division (MCD) in Puerto Rico; "barrio" is appended to the name of the entity in census publications and related data products.			
21	Borough—minor civil division (MCD) in New York; MCD equivalent in New Jersey and Pennsylvania; "borough" is appended to the name of the entity in census publications and related data products.			
22	Census county division (CCD)—minor civil division (MCD) equivalent in 21 States; "division" is appended to the name of the entity in census publications and related data products.			
23	Census subarea—minor civil division (MCD) equivalent in Alaska; "census subarea" is appended to the name of the entity in census publications and related data products.			
24	Census subdistrict—minor civil division (MCD) equivalent in the Virgin Islands of the United States; "subdistrict" is appended to the name of the entity in census publications and related data products.			
25	City—minor civil division (MCD) equivalent in 20 States and the District of Columbia; "city" is appended to the name of the entity in census publications and related data products.			
27	District (magisterial, road)—minor civil division (MCD) in Pennsylvania, Virginia, and West Virginia; "district" is appended to the name of the entity in census publications and related data products.			
28	District (assessment, election, magisterial, supervisors', or parish governing authority)—minor civil division (MCD) in Louisiana, Maryland, Mississippi, and West Virginia; no status is appended to the name of the entity in census publications and related data products.			
29	Election precinct—minor civil division (MCD) in Illinois and Nebraska; "precinct" is appended to the name of the entity in census publications and related data products.			
30	Election precinct—minor civil division (MCD) in Illinois and Nebraska; no status is appended to the name of the entity in census publications and related data products.			
31	Gore—minor civil division (MCD) in Maine and Vermont; "gore" is appended to the name of the entity in census publications and related data products.			
32	Grant—minor civil division (MCD) in New Hampshire and Vermont; "grant" is appended to the name of the entity in census publications and related data products.			
33	Independent city—minor civil division (MCD) equivalent in Maryland, Missouri, and Virginia; "city" is appended to the name of the entity in census publications and related data products.			
34	Not used.			
36	Location—minor civil division (MCD) in New Hampshire; "location" is appended to the name of the entity in census publications and related data products.			
38	(none)—minor civil division (MCD) equivalent for Arlington County, Virginia; no status is appended to the name of the entity in census publications and related data products.			
39	Plantation—minor civil division (MCD) in Maine; "plantation" is appended to the name of the entity in census publications and related data products.			
40	Plantation—minor civil division (MCD) in Maine; no status is appended to the name of the entity in census publications and related data products.			
41	Barrio-pueblo—minor civil division (MCD) in Puerto Rico; "barrio-pueblo" is appended to the name of the entity in census publications and related data products.			
42	Purchase—minor civil division (MCD) in New Hampshire; "purchase" is appended to the name of the entity in census publications and related data products.			
43	Town—minor civil division (MCD) in 8 States; MCD equivalent in New Jersey, Pennsylvania, and South Dakota; "town" is appended to the name of the entity in census publications and related data products.			
44	Township—minor civil division (MCD) in 16 States; "township" is appended to the name of the entity in census publications and related data products.			
45	Township—minor civil division (MCD) in Kansas, Nebraska, and North Carolina; no status is appended to the name of the entity in census publications and related data products.			
46	Unorganized territory—minor civil division (MCD) in 9 States; "unorg." is appended to the name of the entity in census publications and related data products.			

NOTE: See footnotes at the end of this section.

IDENTIFICATION SECTION—Con.

Field name	Data dictionary reference name	Field size	Starting position	Data type
47 Village—minor civil division (MCD) equivalent in New Jersey, Ohio, South Dakota, and Wisconsin; "village" is appended to the name of the entity in census publications and related data products.				
51 Subbarrio—sub-minor civil division (sub-MCD) in Puerto Rico; "subbarrio" is appended to the name of the entity in census publications and related data products.				
55 Comunidad—place (census designated place) in Puerto Rico; "comunidad" is appended to the name of the entity in census publications and related data products.				
56 Borough—place in Connecticut, New Jersey, and Pennsylvania; "borough" is appended to the name of the entity in census publications and related data products.				
57 Census designated place—place; "CDP" is appended to the name of the entity in census publications and related data products.				
58 City—place; "city" is appended to the name of the entity in census publications and related data products.				
59 City—place; used for some cities that have a unique description, no description, or a description included with their name, as follows: Anaconda-Deer Lodge County (Montana): incorporated municipality; Butte-Silver Bow (remainder) (Montana): (none); Carson City, Nevada: (none); Columbus city (remainder) (Georgia): (none); Indianapolis city (remainder) (Indiana): (none); Jacksonville city (remainder) (Florida): (none); Lexington-Fayette (Kentucky): Urban County Government; Lynchburg-Moore County (Tennessee): (none); Milford city (remainder) (Connecticut): (none); Nashville-Davidson (remainder) (Tennessee): "Metropolitan Government of Nashville and Davidson County"; No status is appended to the name of the entity in census publications and related data products.				
60 Town—place; place in 30 States and the Virgin Islands of the United States; "town" is appended to the name of the entity in census publications and related data products.				
61 Village—place; place in 19 States; "village" is appended to the name of the entity in census publications and related data products.				
62 Zona urbana—place (census designated place) in Puerto Rico; "zona urbana" is appended to the name of the entity in census publications and related data products.				
65 Consolidated city in Connecticut, Florida, Georgia, and Indiana—"city" is appended to the name of the entity in census publications and related data products.				
66 Consolidated city—used for some consolidated cities that have unique descriptions or no descriptions, as follows: Butte-Silver Bow (Montana): (none); Nashville-Davidson (Tennessee): "Metropolitan Government of Nashville and Davidson County"; No status is appended to the name of the entity in census publications and related data products.				
68 Census region—no status is appended to the name of the entity in census publications and related data products.				
69 Census division—no status is appended to the name of the entity in census publications and related data products.				
71 Consolidated metropolitan statistical area (CMSA)—"CMSA" is appended to the name of the entity in census publications and related data products.				
72 Metropolitan statistical area (MSA)—"MSA" is appended to the name of the entity in census publications and related data products.				
73 Primary metropolitan statistical area (PMSA)—"PMSA" is appended to the name of the entity in census publications and related data products.				
75 Urbanized area (UA)—no status is appended to the name of the entity in census publications and related data products.				
77 Alaska Native Regional Corporation—no status is appended to the name of the entity in census publications and related data products.				
79 Alaska Native village statistical area—no status is appended to the name of the entity in census publications and related data products.				
80 Tribal designated statistical area—American Indian reservation equivalent for non-land-based tribes outside of Oklahoma; "TDSA" is appended to the name of the entity in census publications and related data products.				
81 Colony—American Indian reservation; "Colony" is appended to the name of the entity in census publications and related data products.				
82 Community—American Indian reservation; "Community" is appended to the name of the entity in census publications and related data products.				
83 Joint area—American Indian reservation equivalent; "joint area" is appended to the name of the entity in census publications and related data products.				

NOTE: See footnotes at the end of this section.

IDENTIFICATION SECTION—Con.

Field name	Data dictionary reference name	Field size	Starting position	Data type
<div style="border: 1px solid black; padding: 5px;"> <p>84 Pueblo—American Indian reservation; "Pueblo" is appended to the name of the entity in census publications and related data products.</p> <p>85 Rancheria—American Indian reservation; "Rancheria" is appended to the name of the entity in census publications and related data products.</p> <p>86 Reservation—American Indian reservation; "Reservation" is appended to the name of the entity in census publications and related data products.</p> <p>87 Reserve—American Indian reservation; "Reserve" is appended to the name of the entity in census publications and related data products.</p> <p>88 Tribal jurisdiction statistical area—American Indian reservation equivalent representing historic tribal areas in Oklahoma; "TJSA" is appended to the name of the entity in census publications and related data products.</p> <p>89 Trust lands—American Indian reservation equivalent; no status is appended to the name of the entity in census publications and related data products.</p> <p>90 (none)—American Indian reservation; no status is appended to the name of the entity in census publications and related data products.</p> </div>				
Population Count (100 percent) ^{1a}	POP100	9	291	A/N
Special Flag.....	SPFLAG	1	300	A/N

Footnotes

1. A unique identifier for each file series. Dress rehearsal files have a "D" in the character following the last character in the file identification code for the equivalent 1990 decennial census file; for example, PL94171D is the identifier for the dress rehearsal file for the P.L. 94-171 data. File identification code for the P.L. 94-171 file is PL94171. File identification codes for summary tape files are STFnn where nn = file number; for example, STF1A is the identification for Summary Tape File 1A. File identification codes for subject summary tape files are SSTFnn where nn = the number of the subject report. File identification codes for special project files are identified by SPmmm where mmm = a three digit special project number. See How to Use This File for further information.
2. Identifies the geographic level for which the data matrices on the summary tape file have been summarized. The summary level sequence chart describes the hierarchical arrangement of the specified geographic areas with other geographic areas, if any. The summary level must be used in combination with the geographic area codes to identify a specific geographic area (for example, summary level 050 and a specific county code must be used together to locate the data for a particular county). See How to Use This File for further information.
3. Indicates an iteration (repetition), for the specified summary level, of the data matrices on the summary tape file for the geographic components listed in the Geographic Component field. See How To Use This File for further information.
4. Indicates an iteration (repetition), for the specified summary level, of the data matrices on the summary tape file for a population or housing characteristic. Only matrices containing a "B" in the prefix have characteristic iterations. See How to Use This File for further information.
5. The logical record is the complete record [identification and set of tables (matrices)] for a geographic entity defined by the summary level, but exclusive of the characteristic iteration. A logical record may have one or more parts (or segments). Each logical record has an assigned sequential integer number within the file. See How to Use This File for further information.
6. Within the logical record, each part is identified uniquely in terms of its sequence. See How to Use This File for further information.
7. This field identifies how many parts (or segments) comprise the entire logical record. See How to Use This File for further information.
8. See Appendix A, Area Classifications, for definition of this field if it is applicable to this file.

IDENTIFICATION SECTION—Con.

9. See the publication, *Geographic Identification Code Scheme*, for codes in this field and related terminology if it is applicable to this file. See Appendix A, Area Classifications, for definition of this field if it is applicable to this file.
10. See the publication, *Geographic Identification Code Scheme*, for FIPS 55 codes in this field and related terminology if it is applicable to this file. See Appendix A, Area Classifications, for definition of this field if it is applicable to this file.
11. Codes in unspecified arrangement for Census Bureau use.
12. Land area measurement in thousandths (.001) of a square kilometer. The accuracy of the area measurement is limited by the inaccuracy inherent in 1) the mapping of the various boundary features in the TIGER File and 2) rounding affecting the last digit in all operations that compute and/or sum the area measurements. Land area includes intermittent water and glaciers, which appear on census maps and in the TIGER File as hydrographic features. An area of .0005 square kilometer is rounded to .001; an area smaller than .0005 is rounded to .000. The decimal point is implied on the file. Square miles can be derived by dividing square kilometers by 2.59. See Appendix A, Area Classifications, for definition of this field if it is applicable to this file.
13. Water area measurement in thousandths (.001) of a square kilometer. Water area is excluded from census blocks by definition, so the water area for a block always will be zero. The accuracy of the area measurement is limited by the inaccuracy inherent in 1) the mapping of the various boundary features in the TIGER File and 2) rounding affecting the last digit in all operations that compute and/or sum the area measurements. Water area excludes intermittent water and glaciers, which are treated as land even though they appear on census maps and in the TIGER File as hydrographic features. An area of .0005 square kilometer is rounded to .001; an area smaller than .0005 is rounded to .000. The decimal point is implied on the file. Square miles can be derived by dividing square kilometers by 2.59. See Appendix A, Area Classifications, for definition of this field if it is applicable to this file.
14. Name of the lowest-level entity represented by the summary level. In addition to the name of the entity, the name field contains the political/statistical area description (PSAD) when appropriate, and sometimes contains the State abbreviation.

For legal entities, the name is the one reported to the Bureau of the Census in the Boundary and Annexation Survey and by other appropriate sources; for statistical entities, the name is determined by the Office of Management and Budget for metropolitan areas and, for other areas, the name is determined by the Bureau of the Census, usually in cooperation with local officials.

When the summary level represents only part of the area specified in the name, the name usually will have "(pt.)" appended to the name/code terminology to designate that this entry for the entity represents only a part of the total entity.
15. The total number of housing units enumerated in the specified summary level as determined in the 100-percent processing.
16. Latitude in degrees, to six decimal places, of a point within the geographic area represented by the summary level. The decimal point is implied on the file. The character immediately preceding the first digit of the latitude of an internal point identifies the direction (hemisphere): a plus sign (+) indicates the Northern Hemisphere; a minus sign (-) indicates the Southern Hemisphere. See Appendix A, Area Classifications, for definition of this field if it is applicable to this file.
17. Longitude in degrees, to six decimal places, of a point with the geographic area represented by the summary level. The decimal point is implied on the file. The character immediately preceding the first digit of the longitude of an internal point identifies the direction (hemisphere): a plus sign (+) indicates the Eastern Hemisphere; a minus sign (-) indicates the Western Hemisphere. A point on the 180th meridian is assigned to the Western Hemisphere (-180000000). See Appendix A, Area Classifications, for definition of this field if it is applicable to this file.
18. The total number of persons enumerated in the specified summary level as determined in the 100-percent processing.

TABLE (MATRIX) SECTION

Table (matrix) number	Table (matrix)	Starting position within segment	Table (matrix) coordi- nates
P1.	100-PERCENT COUNT OF PERSONS(1) [1] <i>Universe: Persons</i>		
	Total	301	301..... 1
P2.	WORKERS(1) [1] <i>Universe: Workers 16 years and over</i>		
	Total	310	310..... 1
P3.	PLACE OF WORK(21) [21] <i>Universe: Workers 16 years and over</i>		
	Work place 1.....	319	319..... 1
	Work place 2.....	328	328..... 2
	Work place 3.....	337	337..... 3
	Work place 4.....	346	346..... 4
	Work place 5.....	355	355..... 5
	Work place 6.....	364	364..... 6
	Work place 7.....	373	373..... 7
	Work place 8.....	382	382..... 8
	Work place 9.....	391	391..... 9
	Work place 10.....	400	400..... 10
	Work place 11.....	409	409..... 11
	Work place 12.....	418	418..... 12
	Work place 13.....	427	427..... 13
	Work place 14.....	436	436..... 14
	Work place 15.....	445	445..... 15
	Work place 16.....	454	454..... 16
	Work place 17.....	463	463..... 17
	Work place 18.....	472	472..... 18
	Work place 19.....	481	481..... 19
	Work place 20.....	490	490..... 20
	Worked elsewhere.....	499	499..... 21
P4.	RACE(5) BY PLACE OF WORK(21) [105] <i>Universe: Workers 16 years and over</i>		
	White:		
	Work place 1.....	508	508..... 1,1
	Work place 2.....	517	517..... 1,2
	Work place 3.....	526	526..... 1,3
	Work place 4.....	535	535..... 1,4
	Work place 5.....	544	544..... 1,5
	Work place 6.....	553	553..... 1,6
	Work place 7.....	562	562..... 1,7
	Work place 8.....	571	571..... 1,8
	Work place 9.....	580	580..... 1,9
	Work place 10.....	589	589..... 1,10
	Work place 11.....	598	598..... 1,11
	Work place 12.....	607	607..... 1,12
	Work place 13.....	616	616..... 1,13
	Work place 14.....	625	625..... 1,14
	Work place 15.....	634	634..... 1,15
	Work place 16.....	643	643..... 1,16
	Work place 17.....	652	652..... 1,17
	Work place 18.....	661	661..... 1,18
	Work place 19.....	670	670..... 1,19
	Work place 20.....	679	679..... 1,20
	Worked elsewhere.....	688	688..... 1,21
	Black:		
	(Repeat PLACE OF WORK).....	697	697..... 2,1
	American Indian, Eskimo, or Aleut:		
	(Repeat PLACE OF WORK).....	886	886..... 3,1

TABLE (MATRIX) SECTION—Con.

Table (matrix) number	Table (matrix)	Starting position within segment	Table (matrix) coordi- nates
P4.	RACE(5) BY PLACE OF WORK(21) [105]—Con.		
	Asian or Pacific Islander:		
	(Repeat PLACE OF WORK)	1075.....	1075 4,1
	Other race:		
	(Repeat PLACE OF WORK)	1264.....	1264 5,1
P5.	HISPANIC ORIGIN(2) BY RACE(5) BY PLACE OF WORK(21) [210]		
	Universe: Workers 16 years and over		
	Not of Hispanic origin:		
	White:		
	Work place 1	1453.....	1453 1,1,1
	Work place 2	1462.....	1462 1,1,2
	Work place 3	1471.....	1471 1,1,3
	Work place 4	1480.....	1480 1,1,4
	Work place 5	1489.....	1489 1,1,5
	Work place 6	1498.....	1498 1,1,6
	Work place 7	1507.....	1507 1,1,7
	Work place 8	1516.....	1516 1,1,8
	Work place 9	1525.....	1525 1,1,9
	Work place 10	1534.....	1534 1,1,10
	Work place 11	1543.....	1543 1,1,11
	Work place 12	1552.....	1552 1,1,12
	Work place 13	1561.....	1561 1,1,13
	Work place 14	1570.....	1570 1,1,14
	Work place 15	1579.....	1579 1,1,15
	Work place 16	1588.....	1588 1,1,16
	Work place 17	1597.....	1597 1,1,17
	Work place 18	1606.....	1606 1,1,18
	Work place 19	1615.....	1615 1,1,19
	Work place 20	1624.....	1624 1,1,20
	Worked elsewhere	1633.....	1633 1,1,21
	Black:		
	(Repeat PLACE OF WORK)	1642.....	1642 1,2,1
	American Indian, Eskimo, or Aleut:		
	(Repeat PLACE OF WORK)	1831.....	1831 1,3,1
	Asian or Pacific Islander:		
	(Repeat PLACE OF WORK)	2020.....	2020 1,4,1
	Other race:		
	(Repeat PLACE OF WORK)	2209.....	2209 1,5,1
	Hispanic origin:		
	(Repeat RACE By PLACE OF WORK)	2398.....	2398 2,1,1
H1.	100-PERCENT COUNT OF HOUSING UNITS(1) [1]		
	Universe: Housing units		
	Total	3343.....	3343 1
	End of Record		

APPENDIX A. Area Classifications

CONTENTS

Alaska (Native Regional Corporation (ANRC)) (See American Indian and Alaska Native Area)	
Alaska Native Village (ANV) (See American Indian and Alaska Native Area)	
Alaska Native Village Statistical Area (See American Indian and Alaska Native Area)	
American Indian and Alaska Native Area	A-1
American Indian Reservation (See American Indian and Alaska Native Area, see County Subdivision)	
American Indian Reservation and Trust Land (See American Indian and Alaska Native Area)	
American Samoa (See Outlying Areas of the United States, see State)	
Area Measurement	A-3
Assessment District (See County Subdivision)	
Block	A-3
Block Group (BG)	A-4
Block Numbering Area (BNA) (See Census Tract and Block Numbering Area)	
Borough (See County Subdivision, see Place)	
Borough and Census Area (Alaska) (See County)	
Boundary Changes	A-4
Census Area (Alaska) (See County)	
Census Block (See Block)	
Census Code (See Geographic Code)	
Census County Division (CCD) (See County Subdivision)	
Census Designated Place (CDP) (See Place)	
Census Division (See Census Region and Census Division)	
Census Geographic Code (See Geographic Code)	
Census Region and Census Division	A-4
Census Subarea (Alaska) (See County Subdivision)	
Census Tract and Block Numbering Area	A-5
Central City (See Metropolitan Area)	
Central Place (See Urbanized Area)	
City (See Place)	
Congressional District (CD)	A-6
Consolidated City (See Place)	
Consolidated Metropolitan Statistical Area (CMSA) (See Metropolitan Area)	
County	A-6
County Subdivision	A-6
Crews of Vessels (See Area Measurement, see Block, see Census Tract and Block Numbering Area)	
Division (See Census Region and Division, see County Subdivision)	
Election District (See County Subdivision, see Voting District)	
Extended City (See Urban and Rural)	
Farm (See Urban and Rural)	
Federal Information Processing Standards (FIPS) Code (See Geographic Code)	
Geographic Block Group (See Block Group)	
Geographic Code	A-7
Geographic Presentation	A-7
Gore (See County Subdivision)	
Grant (See County Subdivision)	
Guam (See Outlying Areas of the United States, see State)	
Hierarchical Presentation (See Geographic Presentation)	
Historic Areas of Oklahoma (See American Indian and Alaska Native Area, Tribal Jurisdiction Statistical Area)	
Historical Counts	A-8
Incorporated Place (See Place)	
Independent City (See County)	
Internal Point	A-8
Inventory Presentation (See Geographic Presentation)	
Land Area (See Area Measurement)	

Latitude (See Internal Point)	
Longitude (See Internal Point)	
Magisterial District (See County Subdivision)	
Metropolitan Area (MA)	A-8
Metropolitan Statistical Area (MSA) (See Metropolitan Area)	
Minor Civil Division (MCD) (See County Subdivision)	
Northern Mariana Islands (See Outlying Areas of the United States, see State)	
Outlying Areas of the United States	A-9
Palau (See Outlying Areas of the United States, see State)	
Parish (Louisiana) (See County)	
Parish Governing Authority District (See County Subdivision)	
Place	A-9
Plantation (See County Subdivision)	
Population or Housing Unit Density	A-11
Precinct (See County Subdivision, see Voting District)	
Primary Metropolitan Statistical Area (PMSA) (See Metropolitan Area)	
Puerto Rico (See Outlying Areas of the United States, see State)	
Purchase (See County Subdivision)	
Region (See Census Region and Census Division)	
Rural (See Urban and Rural)	
Selected States (See County Subdivision, see State)	
State	A-11
Supervisors' District (See County Subdivision)	
Tabulation Block Group (See Block Group)	
TIGER	A-11
Town (See County Subdivision, see Place)	
Township (See County Subdivision)	
Tract (See Census Tract and Block Numbering Area)	
Tribal Designated Statistical Area (TDSA) (See American Indian and Alaska Native Area)	
Tribal Jurisdiction Statistical Area (TJSA) (See American Indian and Alaska Native Area)	
Trust Land (See American Indian and Alaska Native Area)	
United States	A-11
Unorganized Territory (unorg.) (See County Subdivision)	
Urban and Rural	A-11
Urbanized Area (UA)	A-12
Village (See Place)	
Virgin Islands (See Outlying Areas of the United States, see State)	
Voting District (VTD)	A-13
Water Area (See Area Measurement)	
ZIP Code	A-13

These definitions are for all geographic entities and concepts that the Census Bureau will include in its standard 1990 census data products. Not all entities and concepts are shown in any one 1990 census data product. For a description of geographic areas included in each data product, see appendix F.

AMERICAN INDIAN AND ALASKA NATIVE AREA Alaska Native Regional Corporation (ANRC)

Alaska Native Regional Corporations (ANRC's) are corporate entities established under the Alaska Native Claims Settlement Act of 1972, Public Law 92-203, as amended by Public Law 94-204, to conduct both business and nonprofit affairs of Alaska Natives. Alaska is divided into

12 ANRC's that cover the entire State, except for the Annette Islands Reserve. The boundaries of the 12 ANRC's were established by the Department of the Interior, in cooperation with Alaska Natives. Each ANRC was designed to include, as far as practicable, Alaska Natives with a common heritage and common interests. The ANRC boundaries for the 1990 census were identified by the Bureau of Land Management. A 13th region was established for Alaska Natives who are not permanent residents and who chose not to enroll in one of the 12 ANRC's; no census products are prepared for the 13th region. ANRC's were first identified for the 1980 census.

Each ANRC is assigned a two-digit census code ranging from 07 through 84. These census codes are assigned in alphabetical order of the ANRC's.

Alaska Native Village (ANV) Statistical Area

Alaska Native villages (ANV's) constitute tribes, bands, clans, groups, villages, communities, or associations in Alaska that are recognized pursuant to the Alaska Native Claims Settlement Act of 1972, Public Law 92-203. Because ANV's do not have legally designated boundaries, the Census Bureau has established Alaska Native village statistical areas (ANVSA's) for statistical purposes. For the 1990 census, the Census Bureau cooperated with officials of the nonprofit corporation within each participating Alaska Native Regional Corporation (ANRC), as well as other knowledgeable officials, to delineate boundaries that encompass the settled area associated with each ANV. ANVSA's are located within ANRC's and do not cross ANRC boundaries. ANVSA's for the 1990 census replace the ANV's that the Census Bureau recognized for the 1980 census.

Each ANVSA is assigned a four-digit census code ranging from 6001 through 8989. Each ANVSA also is assigned a five-digit FIPS code. Both the census and FIPS codes are assigned in alphabetical order of ANVSA's.

American Indian Reservation and Trust Land

American Indian Reservation—Federal American Indian reservations are areas with boundaries established by treaty, statute, and/or executive or court order, and recognized by the Federal Government as territory in which American Indian tribes have jurisdiction. State reservations are lands held in trust by State governments for the use and benefit of a given tribe. The reservations and their boundaries were identified for the 1990 census by the Bureau of Indian Affairs (BIA), Department of Interior (for Federal reservations), and State governments (for State reservations). The names of American Indian reservations recognized by State governments, but not by the Federal Government, are followed by "(State)." Areas composed of reservation lands that are administered jointly and/or are claimed

by two reservations, as identified by the BIA, are called "joint areas," and are treated as separate American Indian reservations for census purposes.

Federal reservations may cross State boundaries, and Federal and State reservations may cross county, county subdivision, and place boundaries. For reservations that cross State boundaries, only the portion of the reservations in a given State are shown in the data products for that State; the entire reservations are shown in data products for the United States.

Each American Indian reservation is assigned a four-digit census code ranging from 0001 through 4989. These census codes are assigned in alphabetical order of American Indian reservations nationwide, except that joint areas appear at the end of the code range. Each American Indian reservation also is assigned a five-digit FIPS code; because the FIPS codes are assigned in alphabetical sequence of American Indian reservations within each State, the FIPS code is different in each State for reservations in more than one State.

Trust Land—Trust lands are property associated with a particular American Indian reservation or tribe, held in trust by the Federal Government. Trust lands may be held in trust either for a tribe (tribal trust land) or for an individual member of a tribe (individual trust land). Trust lands recognized for the 1990 census comprise all tribal trust lands and inhabited individual trust lands located outside of a reservation boundary. As with other American Indian areas, trust lands may be located in more than one State. Only the trust lands in a given State are shown in the data products for that State; all trust lands associated with a reservation or tribe are shown in data products for the United States. The Census Bureau first reported data for tribal trust lands for the 1980 census.

Trust lands are assigned a four-digit census code and a five-digit FIPS code, the same as that for the reservation with which they are associated. Trust lands not associated with a reservation are presented by tribal name, interspersed alphabetically among the reservations.

Tribal Designated Statistical Area (TDSA)

Tribal designated statistical areas (TDSA's) are areas, delineated outside Oklahoma by federally- and State-recognized tribes without a land base or associated trust lands, to provide statistical areas for which the Census Bureau tabulates data. TDSA's represent areas generally containing the American Indian population over which federally-recognized tribes have jurisdiction and areas in which State tribes provide benefits and services to their members. The names of TDSA's delineated by State-recognized tribes are followed by "(State)." The Census Bureau did not recognize TDSA's before the 1990 census.

Each TDSA is assigned a four-digit census code ranging from 9001 through 9589. The census codes are

assigned in alphabetical order of TDSA's nationwide. Each TDSA also is assigned a five-digit FIPS code in alphabetical order within State.

Tribal Jurisdiction Statistical Area (TJSA)

Tribal jurisdiction statistical areas (TJSA's) are areas, delineated by federally-recognized tribes in Oklahoma without a reservation, for which the Census Bureau tabulates data. TJSA's represent areas generally containing the American Indian population over which one or more tribal governments have jurisdiction; if tribal officials delineated adjacent TJSA's so that they include some duplicate territory, the overlap area is called a "joint use area," which is treated as a separate TJSA for census purposes.

TJSA's replace the "Historic Areas of Oklahoma (excluding urbanized areas)" shown in 1980 census data products. The Historic Areas of Oklahoma comprised the territory located within reservations that had legally established boundaries from 1900 to 1907; these reservations were dissolved during the 2- to 3-year period preceding the statehood of Oklahoma in 1907. The Historic Areas of Oklahoma (excluding urbanized areas) were identified only for the 1980 census.

Each TJSA is assigned a four-digit census code ranging from 5001 through 5989. The census codes are assigned in alphabetical order of TJSA's, except that joint areas appear at the end of the code range. Each TJSA also is assigned a five-digit FIPS code in alphabetical order within Oklahoma.

AREA MEASUREMENT

Area measurements provide the size, in square kilometers (also in square miles in printed reports), recorded for each geographic entity for which the Census Bureau tabulates data in general-purpose data products (except crews-of-vessels entities and ZIP Codes). (Square kilometers may be divided by 2.59 to convert an area measurement to square miles.) Area was calculated from the specific set of boundaries recorded for the entity in the Census Bureau's geographic data base (see "TIGER"). On machine-readable files, area measurements are shown to three decimal places; the decimal point is implied. In printed reports and listings, area measurements are shown to one decimal.

The Census Bureau provides measurements for both land area and total water area for the 1990 census; the water figure includes inland, coastal, Great Lakes, and territorial water. (For the 1980 census, the Census Bureau provided area measurements for land and inland water.) The Census Bureau will provide measurements for the component types of water for the affected entities in a separate file. "Inland water" consists of any lake, reservoir, pond, or similar body of water that is recorded in the Census Bureau's geographic data base. It also includes any river, creek, canal, stream, or similar

feature that is recorded in that data base as a two-dimensional feature (rather than as a single line). The portions of the oceans and related large embayments (such as the Chesapeake Bay and Puget Sound), the Gulf of Mexico, and the Caribbean Sea that belong to the United States and its territories are considered to be "coastal" and "territorial" waters; the Great Lakes are treated as a separate water entity. Rivers and bays that empty into these bodies of water are treated as "inland water" from the point beyond which they are narrower than one nautical mile across. Identification of land and inland, coastal, and territorial waters is for statistical purposes, and does not necessarily reflect legal definitions thereof.

By definition, census blocks do not include water within their boundaries; therefore, the water area of a block is always zero. Land area measurements may disagree with the information displayed on census maps and in the TIGER file because, for area measurement purposes, features identified as "intermittent water" and "glacier" are reported as land area. For this reason, it may not be possible to derive the land area for an entity by summing the land area of its component census blocks. In addition, the water area measurement reported for some geographic entities includes water that is not included in any lower-level geographic entity. Therefore, because water is contained only in a higher-level geographic entity, summing the water measurements for all the component lower-level geographic entities will not yield the water area of that higher-level entity. This occurs, for example, where water is associated with a county but is not within the legal boundary of any minor civil division, or the water is associated with a State but is not within the legal boundary of any county. Crews-of-vessels entities (see "Census Tract and Block Numbering Area" and "Block") do not encompass territory and therefore have no area measurements. ZIP Codes do not have specific boundaries, and therefore, also do not have area measurements.

The accuracy of any area measurement figure is limited by the inaccuracy inherent in (1) the location and shape of the various boundary features in the data base, and (2) rounding affecting the last digit in all operations that compute and/or sum the area measurements.

BLOCK

Census blocks are small areas bounded on all sides by visible features such as streets, roads, streams, and railroad tracks, and by invisible boundaries such as city, town, township, and county limits, property lines, and short, imaginary extensions of streets and roads.

Tabulation blocks, used in census data products, are in most cases the same as collection blocks, used in the census enumeration. In some cases, collection blocks have been "split" into two or more parts required for data tabulations. Tabulation blocks do not cross the boundaries of counties, county subdivisions, places, census tracts or block numbering areas, American

Indian and Alaska Native areas, congressional districts, voting districts, urban or rural areas, or urbanized areas. The 1990 census is the first for which the entire United States and its possessions are block-numbered.

Blocks are numbered uniquely within each census tract or BNA. A block is identified by a three-digit number, sometimes with a single alphabetical suffix. Block numbers with suffixes generally represent collection blocks that were "split" in order to identify separate geographic entities that divide the original block. For example, when a city limit runs through data collection block 101, the data for the portion inside the city is tabulated in block 101A and the portion outside, in block 101B. A block number with the suffix "Z" represents a "crews-of-vessels" entity for which the Census Bureau tabulates data, but that does not represent a true geographic area; such a block is shown on census maps associated with an anchor symbol and a census tract or block numbering area with a .99 suffix.

BLOCK GROUP (BG)

Geographic Block Group

A geographic block group (BG) is a cluster of blocks having the same first digit of their three-digit identifying numbers within a census tract or block numbering area (BNA). For example, BG 3 within a census tract or BNA includes all blocks numbered between 301 and 397. In most cases, the numbering involves substantially fewer than 97 blocks. Geographic BG's never cross census tract or BNA boundaries, but may cross the boundaries of county subdivisions, places, American Indian and Alaska Native areas, urbanized areas, voting districts, and congressional districts. BG's generally contain between 250 and 550 housing units, with the ideal size being 400 housing units.

Tabulation Block Group

In the data tabulations, a geographic BG may be split to present data for every unique combination of county subdivision, place, American Indian and Alaska Native area, urbanized area, voting district, urban/rural and congressional district shown in the data product; for example, if BG 3 is partly in a city and partly outside the city, there will be separate tabulated records for each portion of BG 3. BG's are used in tabulating decennial census data nationwide in the 1990 census, in all block-numbered areas in the 1980 census, and in Tape Address Register (TAR) areas in the 1970 census. For purposes of data presentation, BG's are a substitute for the enumeration districts (ED's) used for reporting data in many parts of the United States for the 1970 and 1980 censuses, and in all areas for pre-1970 censuses.

BOUNDARY CHANGES

The boundaries of some counties, county subdivisions, American Indian and Alaska Native areas, and

many incorporated places, changed between those reported for the 1980 census and January 1, 1990. Boundary changes to legal entities result from:

1. Annexations to or detachments from legally established governmental units.
2. Mergers or consolidations of two or more governmental units.
3. Establishment of new governmental units.
4. Disincorporations or disorganizations of existing governmental units.
5. Changes in treaties and Executive Orders.

The historical counts shown for counties, county subdivisions, and places are not updated for such changes, and thus reflect the population and housing units in the area as delineated at each census. Information on boundary changes reported between the 1980 and 1990 censuses for counties, county subdivisions, and incorporated places is presented in the "User Notes" section of the technical documentation of Summary Tape Files 1 and 3, and in the 1990 CPH-2, *Population and Housing Unit Counts* printed reports. For information on boundary changes for such areas in the decade preceding other decennial censuses, see the *Number of Inhabitants* reports for each census. Boundary changes are not reported for some areas, such as census designated places and block groups.

CENSUS REGION AND CENSUS DIVISION

Census Division

Census divisions are groupings of States that are subdivisions of the four census regions. There are nine divisions, which the Census Bureau adopted in 1910 for the presentation of data. The regions, divisions, and their constituent States are:

Northeast Region

New England Division:

Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut

Middle Atlantic Division:

New York, New Jersey, Pennsylvania

Midwest Region

East North Central Division:

Ohio, Indiana, Illinois, Michigan, Wisconsin

West North Central Division:

Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas

South Region

South Atlantic Division:

Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida

East South Central Division:

Kentucky, Tennessee, Alabama, Mississippi

West South Central Division:

Arkansas, Louisiana, Oklahoma, Texas

West Region

Mountain Division:

Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada

Pacific Division:

Washington, Oregon, California, Alaska, Hawaii

Census Region

Census regions are groupings of States that subdivide the United States for the presentation of data. There are four regions—Northeast, Midwest, South, and West. Each of the four census regions is divided into two or more census divisions. Prior to 1984, the Midwest region was named the North Central region. From 1910, when census regions were established, through the 1940's, there were three regions—North, South, and West.

CENSUS TRACT AND BLOCK NUMBERING AREA

Block Numbering Area (BNA)

Block numbering areas (BNA's) are small statistical subdivisions of a county for grouping and numbering blocks in nonmetropolitan counties where local census statistical areas committees have not established census tracts. State agencies and the Census Bureau delineated BNA's for the 1990 census, using guidelines similar to those for the delineation of census tracts. BNA's do not cross county boundaries.

BNA's are identified by a four-digit basic number and may have a two-digit suffix; for example, 9901.07. The decimal point separating the four-digit basic BNA number from the two-digit suffix is shown in printed reports, in microfiche, and on census maps; in machine-readable files, the decimal point is implied. Many BNA's do not have a suffix; in such cases, the suffix field is left blank in all data products. BNA numbers range from 9501 through 9989.99, and are unique within a county (numbers in the range of 0001 through 9499.99 denote a census tract). The suffix .99 identifies a BNA that was

populated entirely by persons aboard one or more civilian or military ships. A "crews-of-vessels" BNA appears on census maps only as an anchor symbol with its BNA number (and block numbers on maps showing block numbers); the BNA relates to the ships associated with the onshore BNA's having the same four-digit basic number. Suffixes in the range .80 through .98 usually identify BNA's that either were revised or were created during the 1990 census data collection activities. Some of these revisions produced BNA's that have extremely small land area and may have little or no population or housing. For data analysis, such a BNA can be summarized with an adjacent BNA.

Census Tract

Census tracts are small, relatively permanent statistical subdivisions of a county. Census tracts are delineated for all metropolitan areas (MA's) and other densely populated counties by local census statistical areas committees following Census Bureau guidelines (more than 3,000 census tracts have been established in 221 counties outside MA's). Six States (California, Connecticut, Delaware, Hawaii, New Jersey, and Rhode Island) and the District of Columbia are covered entirely by census tracts. Census tracts usually have between 2,500 and 8,000 persons and, when first delineated, are designed to be homogeneous with respect to population characteristics, economic status, and living conditions. Census tracts do not cross county boundaries. The spatial size of census tracts varies widely depending on the density of settlement. Census tract boundaries are delineated with the intention of being maintained over a long time so that statistical comparisons can be made from census to census. However, physical changes in street patterns caused by highway construction, new development, etc., may require occasional revisions; census tracts occasionally are split due to large population growth, or combined as a result of substantial population decline. Census tracts are referred to as "tracts" in all 1990 data products.

Census tracts are identified by a four-digit basic number and may have a two-digit suffix; for example, 6059.02. The decimal point separating the four-digit basic tract number from the two-digit suffix is shown in printed reports, in microfiche, and on census maps; in machine-readable files, the decimal point is implied. Many census tracts do not have a suffix; in such cases, the suffix field is left blank in all data products. Leading zeros in a census tract number (for example, 002502) are shown only on machine-readable files.

Census tract numbers range from 0001 through 9499.99 and are unique within a county (numbers in the range of 9501 through 9989.99 denote a block numbering area). The suffix .99 identifies a census tract that was populated entirely by persons aboard one or more civilian or military ships. A "crews-of-vessels" census tract appears on census maps only as an anchor

symbol with its census tract number (and block numbers on maps showing block numbers). These census tracts relate to the ships associated with the onshore census tract having the same four-digit basic number. Suffixes in the range .80 through .98 usually identify census tracts that either were revised or were created during the 1990 census data collection activities. Some of these revisions may have resulted in census tracts that have extremely small land area and may have little or no population or housing. For data analysis, such a census tract can be summarized with an adjacent census tract.

CONGRESSIONAL DISTRICT (CD)

Congressional districts (CD's) are the 435 areas from which persons are elected to the U.S. House of Representatives. After the apportionment of congressional seats among the States, based on census population counts, each State is responsible for establishing CD's for the purpose of electing representatives. Each CD is to be as equal in population to all other CD's in the State as practicable, based on the decennial census counts.

The CD's that were in effect on January 1, 1990 were those of the 101st Congress. Data on the 101st Congress appear in an early 1990 census data product (Summary Tape File 1A). The CD's of the 101st Congress are the same as those in effect for the 102nd Congress. CD's of the 103rd Congress, reflecting redistricting based on the 1990 census, are summarized in later 1990 data products (STF's 1D and 3D, and 1990 CPH-4, *Population and Housing Characteristics for Congressional Districts of the 103rd Congress* printed reports).

COUNTY

The primary political divisions of most States are termed "counties." In Louisiana, these divisions are known as "parishes." In Alaska, which has no counties, the county equivalents are the organized "boroughs" and the "census areas" that are delineated for statistical purposes by the State of Alaska and the Census Bureau. In four States (Maryland, Missouri, Nevada, and Virginia), there are one or more cities that are independent of any county organization and thus constitute primary divisions of their States. These cities are known as "independent cities" and are treated as equivalent to counties for statistical purposes. That part of Yellowstone National Park in Montana is treated as a county equivalent. The District of Columbia has no primary divisions, and the entire area is considered equivalent to a county for statistical purposes.

Each county and county equivalent is assigned a three-digit FIPS code that is unique within State. These codes are assigned in alphabetical order of county or county equivalent within State, except for the independent cities, which follow the listing of counties.

COUNTY SUBDIVISION

County subdivisions are the primary subdivisions of counties and their equivalents for the reporting of decennial census data. They include census county divisions, census subareas, minor civil divisions, and unorganized territories.

Each county subdivision is assigned a three-digit census code in alphabetical order within county and a five-digit FIPS code in alphabetical order within State.

Census County Division (CCD)

Census county divisions (CCD's) are subdivisions of a county that were delineated by the Census Bureau, in cooperation with State officials and local census statistical areas committees, for statistical purposes. CCD's were established in 21 States where there are no legally established minor civil divisions (MCD's), where the MCD's do not have governmental or administrative purposes, where the boundaries of the MCD's change frequently, and/or where the MCD's are not generally known to the public. CCD's have no legal functions, and are not governmental units.

The boundaries of CCD's usually are delineated to follow visible features, and in most cases coincide with census tract or block numbering area boundaries. The name of each CCD is based on a place, county, or well-known local name that identifies its location. CCD's have been established in the following 21 States: Alabama, Arizona, California, Colorado, Delaware, Florida, Georgia, Hawaii, Idaho, Kentucky, Montana, Nevada, New Mexico, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Utah, Washington, and Wyoming. For the 1980 census, the county subdivisions recognized for Nevada were MCD's.

Census Subarea (Alaska)

Census subareas are statistical subdivisions of boroughs and census areas (county equivalents) in Alaska. Census subareas were delineated cooperatively by the State of Alaska and the Census Bureau. The census subareas, identified first in 1980, replaced the various types of subdivisions used in the 1970 census.

Minor Civil Division (MCD)

Minor civil divisions (MCD's) are the primary political or administrative divisions of a county. MCD's represent many different kinds of legal entities with a wide variety of governmental and/or administrative functions. MCD's are variously designated as American Indian reservations, assessment districts, boroughs, election districts, gores, grants, magisterial districts, parish governing authority districts, plantations, precincts, purchases, supervisors' districts, towns, and townships. In some States, all or some incorporated places are not located in any

MCD and thus serve as MCD's in their own right. In other States, incorporated places are subordinate to (part of) the MCD's in which they are located, or the pattern is mixed—some incorporated places are independent of MCD's and others are subordinate to one or more MCD's.

The Census Bureau recognizes MCD's in the following 28 States: Arkansas, Connecticut, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Dakota, Vermont, Virginia, West Virginia, and Wisconsin. The District of Columbia has no primary divisions, and the entire area is considered equivalent to an MCD for statistical purposes.

The MCD's in 12 selected States (Connecticut, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Wisconsin) also serve as general-purpose local governments. The Census Bureau presents data for these MCD's in all data products in which it provides data for places.

Unorganized Territory (unorg.)

In nine States (Arkansas, Iowa, Kansas, Louisiana, Maine, Minnesota, North Carolina, North Dakota, and South Dakota), some counties contain territory that is not included in an MCD recognized by the Census Bureau. Each separate area of unorganized territory in those States is recognized as one or more separate county subdivisions for census purposes. Each unorganized territory is given a descriptive name, followed by the designation "unorg."

GEOGRAPHIC CODE

Geographic codes are shown primarily on machine-readable data products, such as computer tape and compact disc-read only memory (CD-ROM), but also appear on other products such as microfiche; they also are shown on some census maps. Codes are identified as "census codes" only if there is also a Federal Information Processing Standards (FIPS) code for the same geographic entity. A code that is not identified as either "census" or "FIPS" is usually a census code for which there is no FIPS equivalent, or for which the Census Bureau does not use the FIPS code. The exceptions, which use only the FIPS code in census products, are county, congressional district, and metropolitan area (that is, metropolitan statistical area, consolidated metropolitan statistical area, and primary metropolitan statistical area).

Census Code

Census codes are assigned for a variety of geographic entities, including American Indian and Alaska

Native area, census division, census region, county subdivision, place, State, urbanized area, and voting district. The structure, format, and meaning of census codes appear in the 1990 census *Geographic Identification Code Scheme*; in the data dictionary portion of the technical documentation for summary tape files, CD-ROM's, and microfiche.

Federal Information Processing Standards (FIPS) Code

Federal Information Processing Standards (FIPS) codes are assigned for a variety of geographic entities, including American Indian and Alaska Native area, congressional district, county, county subdivision, metropolitan area, place, and State. The structure, format, and meaning of FIPS codes used in the census are shown in the 1990 census *Geographic Identification Code Scheme*; in the data dictionary portion of the technical documentation for summary tape files, CD-ROM's, and microfiche.

The objective of the FIPS codes is to improve the use of data resources of the Federal Government and avoid unnecessary duplication and incompatibilities in the collection, processing, and dissemination of data. More information about FIPS and FIPS code documentation is available from the National Technical Information Service, Springfield, VA 22161.

United States Postal Service (USPS) Code

United States Postal Service (USPS) codes for States are used in all 1990 data products. The codes are two-character alphabetic abbreviations. These codes are the same as the FIPS two-character alphabetic abbreviations.

GEOGRAPHIC PRESENTATION

Hierarchical Presentation

A hierarchical geographic presentation shows the geographic entities in a superior/subordinate structure in census products. This structure is derived from the legal, administrative, or areal relationships of the entities. The hierarchical structure is depicted in report tables by means of indentation, and is explained for machine-readable media in the discussion of file structure in the geographic coverage portion of the abstract in the technical documentation. An example of hierarchical presentation is the "standard census geographic hierarchy": block, within block group, within census tract or block numbering area, within place, within county subdivision, within county, within State, within division, within region, within the United States. Graphically, this is shown as:

United States
 Region
 Division
 State
 County
 County subdivision
 Place (or part)
 Census tract/ block numbering area
 (or part)
 Block group (or part)
 Block

Inventory Presentation

An inventory presentation of geographic entities is one in which all entities of the same type are shown in alphabetical or code sequence, without reference to their hierarchical relationships. Generally, an inventory presentation shows totals for entities that may be split in a hierarchical presentation, such as place, census tract/ block numbering area, or block group. An example of a series of inventory presentations is: State, followed by all the counties in that State, followed by all the places in that State. Graphically, this is shown as:

State
 County "A"
 County "B"
 County "C"
 Place "X"
 Place "Y"
 Place "Z"

HISTORICAL COUNTS

Historical counts for total population and total housing units are shown in the 1990 CPH-2, *Population and Housing Unit Counts* report series. As in past censuses, the general rule for presenting historical data for States, counties, county subdivisions, and places is to show historical counts only for single, continually existing entities. Stated another way, if an entity existed for both the current and preceding censuses, the tables show counts for the preceding censuses. Included in this category are entities of the same type (county, county subdivision, place) even if they had changed their names. Also included are entities that merged, but only if the new entity retained the name of one of the merged entities. The historical counts shown are for each entity as it was bounded at each census.

In cases where an entity was formed since a preceding census, such as a newly incorporated place or a newly organized township, the symbol three dots "..." is shown for earlier censuses. The three-dot symbol also is shown for those parts of a place that have extended into an additional county or county subdivision through annexation or other revision of boundaries since the preceding census.

In a few cases, changes in the boundaries of county subdivisions caused a place to be split into two or more parts, or to be split differently than in the preceding census. If historical counts for the parts of the place as currently split did not appear in a preceding census, "(NA)" is shown for the place in each county subdivision; however, the historical population and housing unit counts of the place appear in tables that show the entire place. For counties, county subdivisions, and places formed since January 1, 1980, 1980 census population and housing unit counts in the 1990 territory are reported in the geographic change notes included in the "User Notes" text section of 1990 CPH-2, *Population and Housing Unit Counts*, and in the technical documentation of Summary Tape Files 1 and 3.

In some cases, population and housing unit counts for individual areas were revised since publication of the 1980 reports (indicated by the prefix "r"). In a number of tables of 1990 CPH-2, *Population and Housing Unit Counts*, 1980 counts are shown for aggregations of individual areas, such as the number, population, and housing unit counts of places in size groups, or urban and rural distributions. Revisions of population and housing unit counts for individual areas were not applied to the various aggregations. Therefore, it may not be possible to determine the individual areas in a given aggregation using the historical counts; conversely, the sum of the counts shown for individual areas may not agree with the aggregation.

INTERNAL POINT

An internal point is a set of geographic coordinates (latitude and longitude) that is located within a specified geographic entity. A single point is identified for each entity; for many entities, this point represents the approximate geographic center of that entity. If the shape of the entity caused this point to be located outside the boundaries of the entity, it is relocated from the center so that it is within the entity. If the internal point for a block falls in a water area, it is relocated to a land area within the block. On machine-readable products, internal points are shown to six decimal places; the decimal point is implied.

METROPOLITAN AREA (MA)

The general concept of a metropolitan area (MA) is one of a large population nucleus, together with adjacent communities that have a high degree of economic and social integration with that nucleus. Some MA's are defined around two or more nuclei.

The MA classification is a statistical standard, developed for use by Federal agencies in the production, analysis, and publication of data on MA's. The MA's are designated and defined by the Federal Office of Management and Budget, following a set of official published standards. These standards were developed by

the interagency Federal Executive Committee on Metropolitan Areas, with the aim of producing definitions that are as consistent as possible for all MA's nationwide.

Each MA must contain either a place with a minimum population of 50,000 or a Census Bureau-defined urbanized area and a total MA population of at least 100,000 (75,000 in New England). An MA comprises one or more central counties. An MA also may include one or more outlying counties that have close economic and social relationships with the central county. An outlying county must have a specified level of commuting to the central counties and also must meet certain standards regarding metropolitan character, such as population density, urban population, and population growth. In New England, MA's are composed of cities and towns rather than whole counties.

The territory, population, and housing units in MA's are referred to as "metropolitan." The metropolitan category is subdivided into "inside central city" and "outside central city." The territory, population, and housing units located outside MA's are referred to as "nonmetropolitan." The metropolitan and nonmetropolitan classification cuts across the other hierarchies; for example, there is generally both urban and rural territory within both metropolitan and nonmetropolitan areas.

To meet the needs of various users, the standards provide for a flexible structure of metropolitan definitions that classify an MA either as a metropolitan statistical area (MSA) or as a consolidated metropolitan statistical area (CMSA) that is divided into primary metropolitan statistical areas (PMSA's). Documentation of the MA standards and how they are applied is available from the Secretary, Federal Executive Committee on Metropolitan Areas, Population Division, U.S. Bureau of the Census, Washington, DC 20233.

Central City

In each MSA and CMSA, the largest place and, in some cases, additional places are designated as "central cities" under the official standards. A few PMSA's do not have central cities. The largest central city and, in some cases, up to two additional central cities are included in the title of the MA; there also are central cities that are not included in an MA title. An MA central city does not include any part of that city that extends outside the MA boundary.

Consolidated and Primary Metropolitan Statistical Area (CMSA and PMSA)

If an area that qualifies as an MA has more than one million persons, primary metropolitan statistical areas (PMSA's) may be defined within it. PMSA's consist of a large urbanized county or cluster of counties that demonstrates very strong internal economic and social links, in addition to close ties to other portions of the larger

area. When PMSA's are established, the larger area of which they are component parts is designated a consolidated metropolitan statistical area (CMSA).

Metropolitan Statistical Area (MSA)

Metropolitan statistical areas (MSA's) are relatively freestanding MA's and are not closely associated with other MA's. These areas typically are surrounded by nonmetropolitan counties.

Metropolitan Area Title and Code

The title of an MSA contains the name of its largest central city and up to two additional city names, provided that the additional places meet specified levels of population, employment, and commuting. Generally, a city with a population of 250,000 or more is in the title, regardless of other criteria.

The title of a PMSA may contain up to three place names, as determined above, or up to three county names, sequenced in order of population. A CMSA title also may include up to three names, the first of which generally is the most populous central city in the area. The second name may be the first city or county name in the most populous remaining PMSA; the third name may be the first city or county name in the next most populous PMSA. A regional designation may be substituted for the second and/or third names in a CMSA title if such a designation is supported by local opinion and is deemed to be unambiguous and suitable by the Office of Management and Budget.

The titles for all MA's also contain the name of each State in which the area is located. Each metropolitan area is assigned a four-digit FIPS code, in alphabetical order nationwide. If the fourth digit of the code is a "2," it identifies a CMSA. Additionally, there is a separate set of two-digit codes for CMSA's, also assigned alphabetically.

OUTLYING AREAS OF THE UNITED STATES

The Census Bureau treats the outlying areas as the statistical equivalents of States for the 1990 census. The outlying areas are American Samoa, Guam, the Commonwealth of the Northern Mariana Islands (Northern Mariana Islands), Republic of Palau (Palau), Puerto Rico, and the Virgin Islands of the United States (Virgin Islands). Geographic definitions specific to each outlying area are shown in appendix A of the text in the data products for each area.

PLACE

Places, for the reporting of decennial census data, include census designated places and incorporated places. Each place is assigned a four-digit census code

that is unique within State. Each place is also assigned a five-digit FIPS code that is unique within State. Both the census and FIPS codes are assigned based on alphabetical order within State. Consolidated cities (see below) are assigned a one-character alphabetical census code that is unique nationwide and a five-digit FIPS code that is unique within State.

Census Designated Place (CDP)

Census designated places (CDP's) are delineated for the decennial census as the statistical counterparts of incorporated places. CDP's comprise densely settled concentrations of population that are identifiable by name, but are not legally incorporated places. Their boundaries, which usually coincide with visible features or the boundary of an adjacent incorporated place, have no legal status, nor do these places have officials elected to serve traditional municipal functions. CDP boundaries may change with changes in the settlement pattern; a CDP with the same name as in previous censuses does not necessarily have the same boundaries.

Beginning with the 1950 census, the Census Bureau, in cooperation with State agencies and local census statistical areas committees, has identified and delineated boundaries for CDP's. In the 1990 census, the name of each such place is followed by "CDP." In the 1980 census, "(CDP)" was used; in 1970, 1960, and 1950 censuses, these places were identified by "(U)," meaning "unincorporated place."

To qualify as a CDP for the 1990 census, an unincorporated community must have met the following criteria:

1. In all States except Alaska and Hawaii, the Census Bureau uses three population size criteria to designate a CDP. These criteria are:
 - a. 1,000 or more persons if outside the boundaries of an urbanized area (UA) delineated for the 1980 census or a subsequent special census.
 - b. 2,500 or more persons if inside the boundaries of a UA delineated for the 1980 census or a subsequent special census.
 - c. 250 or more persons if outside the boundaries of a UA delineated for the 1980 census or a subsequent special census, and within the official boundaries of an American Indian reservation recognized for the 1990 census.
2. In Alaska, 25 or more persons if outside a UA, and 2,500 or more persons if inside a UA delineated for the 1980 census or a subsequent special census.
3. In Hawaii, 300 or more persons, regardless of whether the community is inside or outside a UA.

For the 1990 census, CDP's qualified on the basis of the population counts prepared for the 1990 Postcensus Local Review Program. Because these counts were subject to change, a few CDP's may have final population counts lower than the minimums shown above.

Hawaii is the only State with no incorporated places recognized by the Bureau of the Census. All places shown for Hawaii in the data products are CDP's. By agreement with the State of Hawaii, the Census Bureau does not show data separately for the city of Honolulu, which is coextensive with Honolulu County.

Consolidated City

A consolidated government is a unit of local government for which the functions of an incorporated place and its county or minor civil division (MCD) have merged. The legal aspects of this action may result in both the primary incorporated place and the county or MCD continuing to exist as legal entities, even though the county or MCD performs few or no governmental functions and has few or no elected officials. Where this occurs, and where one or more other incorporated places in the county or MCD continue to function as separate governments, even though they have been included in the consolidated government, the primary incorporated place is referred to as a "consolidated city."

The data presentation for consolidated cities varies depending upon the geographic presentation. In hierarchical presentations, consolidated cities are not shown. These presentations include the semi-independent places and the "consolidated city (remainder)." Where the consolidated city is coextensive with a county or county subdivision, the data shown for those areas in hierarchical presentations are equivalent to those for the consolidated government.

For inventory geographic presentations, the consolidated city appears at the end of the listing of places. The data for the consolidated city include places that are part of the consolidated city. The "consolidated city (remainder)" is the portion of the consolidated government minus the semi-independent places, and is shown in alphabetical sequence with other places.

In summary presentations by size of place, the consolidated city is not included. The places semi-independent of consolidated cities are categorized by their size, as is the "consolidated city (remainder)."

Each consolidated city is assigned a one-character alphabetic census code. Each consolidated city also is assigned a five-digit FIPS code that is unique within State. The semi-independent places and the "consolidated city (remainder)" are assigned a four-digit census code and a five-digit FIPS place code that are unique within State. Both the census and FIPS codes are assigned based on alphabetical order within State.

Incorporated Place

Incorporated places recognized in 1990 census data products are those reported to the Census Bureau as legally in existence on January 1, 1990 under the laws of their respective States as cities, boroughs, towns, and villages, with the following exceptions: the towns in the New England States, New York, and Wisconsin, and the boroughs in New York are recognized as minor civil divisions for census purposes; the boroughs in Alaska are county equivalents.

POPULATION OR HOUSING UNIT DENSITY

Population or housing unit density is computed by dividing the total population or housing units of a geographic unit (for example, United States, State, county, place) by its land area measured in square kilometers or square miles. Density is expressed as both "persons (or housing units) per square kilometer" and "persons (or housing units) per square mile" of land area in 1990 census printed reports.

STATE

States are the primary governmental divisions of the United States. The District of Columbia is treated as a statistical equivalent of a State for census purposes. The four census regions, nine census divisions, and their component States are shown under "CENSUS REGION AND CENSUS DIVISION" in this appendix.

The Census Bureau treats the outlying areas as State equivalents for the 1990 census. The outlying areas are American Samoa, Guam, the Northern Mariana Islands, Palau, Puerto Rico, and the Virgin Islands of the United States. Geographic definitions specific to each outlying area are shown in appendix A in the data products for each area.

Each State and equivalent is assigned a two-digit numeric Federal Information Processing Standards (FIPS) code in alphabetical order by State name, followed by the outlying area names. Each State and equivalent area also is assigned a two-digit census code. This code is assigned on the basis of the geographic sequence of each State within each census division; the first digit of the code is the code for the respective division. Puerto Rico, the Virgin Islands, and the outlying areas of the Pacific are assigned "0" as the division code. Each State and equivalent area also is assigned the two-letter FIPS/United States Postal Service (USPS) code.

In 12 selected States (Connecticut, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Wisconsin), the minor civil divisions also serve as general-purpose local governments. The Census Bureau presents data for these minor civil divisions in all data products in which it provides data for places.

TIGER

TIGER is an acronym for the new digital (computer-readable) geographic data base that automates the mapping and related geographic activities required to support the Census Bureau's census and survey programs. The Census Bureau developed the Topologically Integrated Geographic Encoding and Referencing (TIGER) System to automate the geographic support processes needed to meet the major geographic needs of the 1990 census: producing the cartographic products to support data collection and map publication, providing the geographic structure for tabulation and publication of the collected data, assigning residential and employer addresses to their geographic location and relating those locations to the Census Bureau's geographic units, and so forth. The content of the TIGER data base is made available to the public through a variety of "TIGER Extract" files that may be obtained from the Data User Services Division, U.S. Bureau of the Census, Washington, DC 20233.

UNITED STATES

The United States comprises the 50 States and the District of Columbia. In addition, the Census Bureau treats the outlying areas as statistical equivalents of States for the 1990 census. The outlying areas include American Samoa, Guam, the Northern Mariana Islands, Palau, Puerto Rico, and the Virgin Islands.

URBAN AND RURAL

The Census Bureau defines "urban" for the 1990 census as comprising all territory, population, and housing units in urbanized areas and in places of 2,500 or more persons outside urbanized areas. More specifically, "urban" consists of territory, persons, and housing units in:

1. Places of 2,500 or more persons incorporated as cities, villages, boroughs (except in Alaska and New York), and towns (except in the six New England States, New York, and Wisconsin), but excluding the rural portions of "extended cities."
2. Census designated places of 2,500 or more persons.
3. Other territory, incorporated or unincorporated, included in urbanized areas.

Territory, population, and housing units not classified as urban constitute "rural." In the 100-percent data products, "rural" is divided into "places of less than 2,500" and "not in places." The "not in places" category comprises "rural" outside incorporated and census designated places and the rural portions of extended

cities. In many data products, the term "other rural" is used; "other rural" is a residual category specific to the classification of the rural in each data product.

In the sample data products, rural population and housing units are subdivided into "rural farm" and "rural nonfarm." "Rural farm" comprises all rural households and housing units on farms (places from which \$1,000 or more of agricultural products were sold in 1989); "rural nonfarm" comprises the remaining rural.

The urban and rural classification cuts across the other hierarchies; for example, there is generally both urban and rural territory within both metropolitan and nonmetropolitan areas.

In censuses prior to 1950, "urban" comprised all territory, persons, and housing units in incorporated places of 2,500 or more persons, and in areas (usually minor civil divisions) classified as urban under special rules relating to population size and density. The definition of urban that restricted itself to incorporated places having 2,500 or more persons excluded many large, densely settled areas merely because they were not incorporated. Prior to the 1950 census, the Census Bureau attempted to avoid some of the more obvious omissions by classifying selected areas as "urban under special rules." Even with these rules, however, many large, closely built-up areas were excluded from the urban category.

To improve its measure of urban territory, population, and housing units, the Census Bureau adopted the concept of the urbanized area and delineated boundaries for unincorporated places (now, census designated places) for the 1950 census. Urban was defined as territory, persons, and housing units in urbanized areas and, outside urbanized areas, in all places, incorporated or unincorporated, that had 2,500 or more persons. With the following three exceptions, the 1950 census definition of urban has continued substantially unchanged. First, in the 1960 census (but not in the 1970, 1980, or 1990 censuses), certain towns in the New England States, townships in New Jersey and Pennsylvania, and Arlington County, Virginia, were designated as urban. However, most of these "special rule" areas would have been classified as urban anyway because they were included in an urbanized area or in an unincorporated place of 2,500 or more persons. Second, "extended cities" were identified for the 1970, 1980, and 1990 censuses. Extended cities primarily affect the figures for urban and rural territory (area), but have very little effect on the urban and rural population and housing units at the national and State levels—although for some individual counties and urbanized areas, the effects have been more evident. Third, changes since the 1970 census in the criteria for defining urbanized areas have permitted these areas to be defined around smaller centers.

Documentation of the urbanized area and extended city criteria is available from the Chief, Geography Division, U.S. Bureau of the Census, Washington, DC 20233.

Extended City

Since the 1960 census, there has been a trend in some States toward the extension of city boundaries to include territory that is essentially rural in character. The classification of all the population and living quarters of such places as urban would include in the urban designation territory, persons, and housing units whose environment is primarily rural. For the 1970, 1980, and 1990 censuses, the Census Bureau identified as rural such territory and its population and housing units for each extended city whose closely settled area was located in an urbanized area. For the 1990 census, this classification also has been applied to certain places outside urbanized areas.

In summary presentations by size of place, the urban portion of an extended city is classified by the population of the entire place; the rural portion is included in "other rural."

URBANIZED AREA (UA)

The Census Bureau delineates urbanized areas (UA's) to provide a better separation of urban and rural territory, population, and housing in the vicinity of large places. A UA comprises one or more places ("central place") 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 density of at least 1,000 persons per square mile. The urban fringe also includes outlying territory of such density if it was connected to the core of the contiguous area by road and is within 1 1/2 road miles of that core, or within 5 road miles of the core but separated by water or other undevelopable territory. Other territory with a population density of fewer than 1,000 people per square mile is included in the urban fringe if it eliminates an enclave or closes an indentation in the boundary of the urbanized area. The population density is determined by (1) outside of a place, one or more contiguous census blocks with a population density of at least 1,000 persons per square mile or (2) inclusion of a place containing census blocks that have at least 50 percent of the population of the place and a density of at least 1,000 persons per square mile. The complete criteria are available from the Chief, Geography Division, U.S. Bureau of the Census, Washington, DC 20233.

Urbanized Area Central Place

One or more central places function as the dominant centers of each UA. The identification of a UA central place permits the comparison of this dominant center

with the remaining territory in the UA. There is no limit on the number of central places, and not all central places are necessarily included in the UA title. UA central places include:

1. Each place entirely (or partially, if the place is an extended city) within the UA that is a central city of a metropolitan area (MA).
2. If the UA does not contain an MA central city or is located outside of an MA, the central place(s) is determined by population size.

Urbanized Area Title and Code

The title for UA identifies those places that are most important within the UA, and the code is the same as the code for the MA that includes the UA. If a single MA includes

legislative districts) established by State and local governments for purposes of elections. For census purposes, each State participating in Phase 2 of the 1990 Census Redistricting Data Program outlined the boundaries of VTD's around groups of whole census blocks on census maps. The entities identified as VTD's are not necessarily those legally or currently established. Also, to meet the "whole block" criterion, a State may have had to adjust VTD boundaries to nearby block boundaries. Therefore, the VTD's shown on the 1990 census tapes, listings, and maps may not represent the actual VTD's in effect at the time of the census. In the 1980 census, VTD's were referred to as "election precincts."

code that is unique within each county. The code

is not mostly included in a single MA, if it does not include any place that is a central city of the encompassing MA, or if it is not located in an MA, the Census Bureau uses the population size of the included places, with a preference for incorporated places, to determine the UA title. The name of each State in which the UA is located also is in each UA title.

The numeric code used to identify each UA is the same as the code for the mostly encompassing MA (including CMSA and PMSA). If MA title cities represent multiple UA's, or the UA title city does not correspond to the first name of an MA title, the Census Bureau assigns a code based on the alphabetical sequence of the UA title in relationship to the other UA and MA titles.

VOTING DISTRICT (VTD)

A voting district (VTD) is any of a variety of types of areas (for example, election districts, precincts, wards,

ZIP CODE*

ZIP Codes are administrative units established by the United States Postal Service (USPS) for the distribution of mail. ZIP Codes serve addresses for the most efficient delivery of mail, and therefore generally do not respect political or census statistical area boundaries. ZIP Codes usually do not have clearly identifiable boundaries, often serve a continually changing area, are changed periodically to meet postal requirements, and do not cover all the land area of the United States. ZIP Codes are identified by five-digit codes assigned by the USPS. The first three digits identify a major city or sectional distribution center, and the last two digits generally signify a specific post office's delivery area or point. For the 1990 census, ZIP Code data are tabulated for the five-digit codes in STF 3B.

APPENDIX B.

Definitions of Subject Characteristics

CONTENTS

SUBJECT CHARACTERISTICS	B-1
Employment Status	B-1
Group Quarters	B-2
Institutionalized Persons (See Group Quarters)	
Journey to Work	B-8
Noninstitutionalized Group Quarters (See Group Quarters)	
Place of Work (See Journey to Work)	
Reference Week	B-11
Worker (See Employment Status, see Journey to Work)	

SUBJECT CHARACTERISTICS

These definitions are specific to this tape file. For a complete description of all subject-matter definitions, see appendix B in any 1990 census summary tape file documentation or printed report series that includes sample data. For more information about the various 1990 census data products, see appendix F in this documentation.

EMPLOYMENT STATUS

The data on employment status were derived from answers to questionnaire items 21, 25, and 26, which were asked of a sample of persons. The series of questions on employment status was asked of all persons 15 years old and over and was designed to identify, in this sequence: (1) persons who worked at any time during the reference week; (2) persons who did not work during the reference week but who had jobs or businesses from which they were temporarily absent (excluding layoff); (3) persons on layoff; and (4) persons who did not work during the reference week, but who were looking for work during the last four weeks and were available for work during the reference week. (For more information, see the discussion under "Reference Week.")

The employment status data shown in this and other 1990 census tabulations relate to persons 16 years old and over. Some tabulations showing employment status, however, include persons 15 years old. By definition, these persons are classified as "Not in Labor Force." In the 1940, 1950, and 1960 censuses, employment status data were presented for persons 14 years old and over. The change in the universe was made in 1970 to agree with the official measurement of the labor force as revised in January 1967 by the U.S. Department of Labor. The 1970 census was the last to show employment data for persons 14 and 15 years old.

Employed—All civilians 16 years old and over who were either (1) "at work"—those who did any work at all during the reference week as paid employees, worked in their own business or profession, worked on their own farm, or worked 15 hours or more as unpaid workers on a family farm or in a family business; or (2) were "with a job but not at work"—those who did not work during the reference week but had jobs or businesses from which they were temporarily absent due to illness, bad weather, industrial dispute, vacation, or other personal reasons. Excluded from the employed are persons whose only activity consisted of work around the house or unpaid volunteer work for religious, charitable, and similar organizations; also excluded are persons on active duty in the United States Armed Forces.

Unemployed—All civilians 16 years old and over are classified as unemployed if they (1) were neither "at work" nor "with a job but not at work" during the reference week, and (2) were looking for work during the last 4 weeks, and (3) were available to accept a job. Also included as unemployed are civilians who did not work at all during the reference week and were waiting to be called back to a job from which they had been laid off. Examples of job seeking activities are:

- Registering at a public or private employment office
- Meeting with prospective employers
- Investigating possibilities for starting a professional practice or opening a business
- Placing or answering advertisements
- Writing letters of application
- Being on a union or professional register

Civilian Labor Force—Consists of persons classified as employed or unemployed in accordance with the criteria described above.

Experienced Unemployed—These are unemployed persons who have worked at any time in the past.

Experienced Civilian Labor Force—Consists of the employed and the experienced unemployed.

Labor Force—All persons classified in the civilian labor force plus members of the U.S. Armed Forces (persons on active duty with the United States Army, Air Force, Navy, Marine Corps, or Coast Guard).

Not in Labor Force—All persons 16 years old and over who are not classified as members of the labor force. This category consists mainly of students, housewives, retired workers, seasonal workers enumerated in an *off* season who were not looking for work, institutionalized persons, and persons doing only incidental unpaid family work (less than 15 hours during the reference week).

Worker—This term appears in connection with several subjects: journey-to-work items, class of worker, weeks worked in 1989, and number of workers in family in 1989. Its meaning varies and, therefore, should be determined in each case by referring to the definition of the subject in which it appears.

Actual Hours Worked Last Week—All persons who reported working during the reference week were asked to report in questionnaire item 21b the number of hours that they worked. The statistics on hours worked pertain to the number of hours actually worked at all jobs, and do not necessarily reflect the number of hours typically or usually worked or the scheduled number of hours. The concept of "actual hours" differs from that of "usual hours" described below. The number of persons who worked only a small number of hours is probably understated since such persons sometimes consider themselves as not working. Respondents were asked to include overtime or extra hours worked, but to exclude lunch hours, sick leave, and vacation leave.

Limitation of the Data—The census may understate the number of employed persons because persons who have irregular, casual, or unstructured jobs sometimes report themselves as not working. The number of employed persons "at work" is probably overstated in the census (and conversely, the number of employed "with a job, but not at work" is understated) since some persons on vacation or sick leave erroneously reported themselves as working. This problem has no effect on the total number of employed persons. The reference week for the employment data is not the same for all persons. Since persons can change their employment status from one week to another, the lack of a uniform reference week may mean that the employment data do not reflect the reality of the employment situation of any given week. (For more information, see the discussion under "Reference Week.")

Comparability—The questionnaire items and employment status concepts for the 1990 census are essentially the same as those used in the 1980 and 1970 censuses. However, these concepts differ in many respects from those associated with the 1950 and 1960 censuses.

Since employment data from the census are obtained from respondents in households, they differ from statistics based on reports from individual business establishments, farm enterprises, and certain government programs. Persons employed at more than one job are

counted only once in the census and are classified according to the job at which they worked the greatest number of hours during the reference week. In statistics based on reports from business and farm establishments, persons who work for more than one establishment may be counted more than once. Moreover, some tabulations may exclude private household workers, unpaid family workers, and self-employed persons, but may include workers less than 16 years of age.

An additional difference in the data arises from the fact that persons who had a job but were not at work are included with the employed in the census statistics, whereas many of these persons are likely to be excluded from employment figures based on establishment payroll reports. Furthermore, the employment status data in census tabulations include persons on the basis of place of residence regardless of where they work, whereas establishment data report persons at their place of work regardless of where they live. This latter consideration is particularly significant when comparing data for workers who commute between areas.

Census data on actual hours worked during the reference week may differ from data from other sources. The census measures hours actually worked, whereas some surveys measure hours paid for by employers. Comparability of census actual hours worked data may also be affected by the nature of the reference week (see "Reference Week").

For several reasons, the unemployment figures of the Census Bureau are not comparable with published figures on unemployment compensation claims. For example, figures on unemployment compensation claims exclude persons who have exhausted their benefit rights, new workers who have not earned rights to unemployment insurance, and persons losing jobs not covered by unemployment insurance systems (including some workers in agriculture, domestic services, and religious organizations, and self-employed and unpaid family workers). In addition, the qualifications for drawing unemployment compensation differ from the definition of unemployment used by the Census Bureau. Persons working only a few hours during the week and persons with a job but not at work are sometimes eligible for unemployment compensation but are classified as "Employed" in the census. Differences in the geographical distribution of unemployment data arise because the place where claims are filed may not necessarily be the same as the place of residence of the unemployed worker.

The figures on employment status from the decennial census are generally comparable with similar data collected in the Current Population Survey. However, some difference may exist because of variations in enumeration and processing techniques.

GROUP QUARTERS

All persons not living in households are classified by the Census Bureau as living in group quarters. Two

general categories of persons in group quarters are recognized: (1) institutionalized persons and (2) other persons in group quarters (also referred to as "non-institutional group quarters").

Institutionalized Persons—Includes persons under formally authorized, supervised care or custody in institutions at the time of enumeration. Such persons are classified as "patients or inmates" of an institution regardless of the availability of nursing or medical care, the length of stay, or the number of persons in the institution. Generally, institutionalized persons are restricted to the institutional buildings and grounds (or must have passes or escorts to leave) and thus have limited interaction with the surrounding community. Also, they are generally under the care of trained staff who have responsibility for their safekeeping and supervision.

Type of Institution—The type of institution was determined as part of census enumeration activities. For institutions which specialize in only one specific type of service, all patients or inmates were given the same classification. For institutions which had multiple types of major services (usually general hospitals and Veterans' Administration hospitals), patients were classified according to selected types of wards. For example, in psychiatric wards of hospitals, patients were classified in "mental (psychiatric) hospitals"; in hospital wards for persons with chronic diseases, patients were classified in "hospitals for the chronically ill." Each patient or inmate was classified in only one type of institution. Institutions include the following types:

Correctional Institutions—Includes prisons, Federal detention centers, military stockades and jails, police lockups, halfway houses, local jails, and other confinement facilities, including work farms.

Prisons—Where persons convicted of crimes serve their sentences. In some census products, the prisons are classified by two types of control: (1) "Federal" (operated by the Bureau of Prisons of the Department of Justice) and (2) "State." Residents who are criminally insane were classified on the basis of where they resided at the time of enumeration: (1) in institutions (or hospital wards) operated by departments of correction or similar agencies; or (2) in institutions operated by departments of mental health or similar agencies.

Federal Detention Centers—Operated by the Immigration and Naturalization Service (INS) and the Bureau of Prisons. These facilities include detention centers used by the Park Police; Bureau of Indian Affairs Detention Centers; INS Centers, such as the INS Federal Alien Detention Facility; INS Processing Centers; and INS Contract Detention Centers used to detain aliens under exclusion

or deportation proceedings, as well as those aliens who have not been placed into proceedings, such as custodial required departures; and INS Detention Centers operated within local jails, and State and Federal prisons.

Military Stockades, Jails—Operated by military police and used to hold persons awaiting trial or convicted of violating military laws.

Local Jails and Other Confinement Facilities—Includes facilities operated by counties and cities that primarily hold persons beyond arraignment, usually for more than 48 hours. Also included in this category are work farms used to hold persons awaiting trial or serving time on relatively short sentences and jails run by private businesses under contract for local governments (but *not* by State governments).

Police Lockups—Temporary-holding facilities operated by county and city police that hold persons for 48 hours or less only if they have not been formally charged in court.

Halfway Houses—Operated for correctional purposes and include probation and restitution centers, pre-release centers, and community-residential centers.

Other Types of Correctional Institutions—Privately operated correctional facilities and correctional facilities specifically for alcohol/ drug abuse.

Nursing Homes—Comprises a heterogeneous group of places. The majority of patients are elderly, although persons who require nursing care because of chronic physical conditions may be found in these homes regardless of their age. Included in this category are skilled-nursing facilities, intermediate-care facilities, long-term care rooms in wards or buildings on the grounds of hospitals, or long-term care rooms/nursing wings in congregate housing facilities. Also included are nursing, convalescent, and rest homes, such as soldiers', sailors', veterans', and fraternal or religious homes for the aged, with or without nursing care. In some census products, nursing homes are classified by type of ownership as "Federal," "State," "Private not-for-profit," and "Private for profit."

Mental (Psychiatric) Hospitals—Includes hospitals or wards for the criminally insane not operated by a prison, and psychiatric wards of general hospitals and veterans' hospitals. Patients receive supervised medical/nursing care from formally-trained staff. In some census products, mental hospitals are classified by type of ownership as "Federal," "State or local," "Private," and "Ownership not known."

Hospitals for Chronically Ill—Includes hospitals for patients who require long-term care, including those in military hospitals and wards for the chronically ill located on military bases; or other hospitals or wards for the chronically ill, which include tuberculosis hospitals or wards, wards in general and Veterans' Administration hospitals for the chronically ill, neurological wards, hospices, wards for patients with Hansen's Disease (leprosy) and other incurable diseases, and other unspecified wards for the chronically ill. Patients who had no usual home elsewhere were enumerated as part of the institutional population in the wards of general and military hospitals. Most hospital patients are at the hospital temporarily and were enumerated at their usual place of residence. (For more information, see "Wards in General and Military Hospitals for Patients Who Have No Usual Home Elsewhere.")

Schools, Hospitals, or Wards for the Mentally Retarded—Includes those institutions such as wards in hospitals for the mentally retarded, and intermediate-care facilities for the mentally retarded that provide supervised medical/nursing care from formally-trained staff. In some census products, this category is classified by type of ownership as "Federal," "State or local," "Private," and "Ownership not known."

Schools, Hospitals, or Wards for the Physically Handicapped—Includes three types of institutions: institutions for the blind, those for the deaf, and orthopedic wards and institutions for the physically handicapped. Institutions for persons with speech problems are classified with "institutions for the deaf." The category "orthopedic wards and institutions for the physically handicapped" includes those institutions providing relatively long-term care to accident victims, and to persons with polio, cerebral palsy, and muscular dystrophy. In some census products, this category is classified by type of ownership as "Public," "Private," and "Ownership not known."

Hospitals, and Wards for Drug/Alcohol Abuse—Includes hospitals, and hospital wards in psychiatric and general hospitals. These facilities are equipped medically and designed for the diagnosis and treatment of medical or psychiatric illnesses associated with alcohol or drug abuse. Patients receive supervised medical care from formally-trained staff.

Wards in General and Military Hospitals for Patients Who Have No Usual Home Elsewhere—Includes maternity, neonatal, pediatric (including wards for boarder babies), military, and surgical wards of hospitals, and wards for persons with infectious diseases.

Juvenile Institutions—Includes homes, schools, and other institutions providing care for children (short- or long-term care). Juvenile institutions include the following types:

Homes for Abused, Dependent, and Neglected Children—Includes orphanages and other institutions which provide long-term care (usually more than 30 days) for children. This category is classified in some census products by type of ownership as "Public" and "Private."

Residential Treatment Centers—Includes those institutions which primarily serve children who, by clinical diagnosis, are moderately or seriously disturbed emotionally. Also, these institutions provide long-term treatment services, usually supervised or directed by a psychiatrist.

Training Schools for Juvenile Delinquents—Includes residential training schools or homes, and industrial schools, camps, or farms for juvenile delinquents.

Public Training Schools for Juvenile Delinquents—Usually operated by a State agency (for example, department of welfare, corrections, or a youth authority). Some are operated by county and city governments. These public training schools are specialized institutions serving delinquent children, generally between the ages of 10 and 17 years old, all of whom are committed by the courts.

Private Training Schools—Operated under private auspices. Some of the children they serve are committed by the courts as delinquents. Others are referred by parents or social agencies because of delinquent behavior. One difference between private and public training schools is that, by their administrative policy, private schools have control over their selection and intake.

Detention Centers—Includes institutions providing short-term care (usually 30 days or less) primarily for delinquent children pending disposition of their cases by a court. This category also covers diagnostic centers. In practice, such institutions may be caring for both delinquent and neglected children pending court disposition.

Other Persons in Group Quarters (also referred to as "noninstitutional group quarters")—Includes all persons who live in group quarters other than institutions. Persons who live in the following living quarters are classified as "other persons in group quarters" when there are 10 or more unrelated persons living in the unit; otherwise, these living quarters are classified as housing units.

Rooming Houses—Includes persons residing in rooming and boarding houses and living in quarters with 10 or more unrelated persons.

Group Homes—Includes "community-based homes" that provide care and supportive services. Such places include homes for the mentally ill, mentally retarded, and physically handicapped; drug/alcohol halfway houses; communes; and maternity homes for unwed mothers.

Homes for the Mentally Ill—Includes community-based homes that provide care primarily for the mentally ill. In some data products, this category is classified by type of ownership as "Federal," "State," "Private," and "Ownership not known." Homes which combine treatment of the physically handicapped with treatment of the mentally ill are counted as homes for the mentally ill.

Homes for the Mentally Retarded—Includes community-based homes that provide care primarily for the mentally retarded. Homes which combine treatment of the physically handicapped with treatment of the mentally retarded are counted as homes for the mentally retarded. This category is classified by type of ownership in some census products, as "Federal," "State," "Private," or "Ownership not known."

Homes for the Physically Handicapped—Includes community-based homes for the blind, for the deaf, and other community-based homes for the physically handicapped. Persons with speech problems are classified with homes for the deaf. In some census products, this category is classified by type of ownership as "Public," "Private," or "Ownership not known."

Homes or Halfway Houses for Drug/Alcohol Abuse—Includes persons with no usual home elsewhere in places that provide community-based care and supportive services to persons suffering from a drug/alcohol addiction and to recovering alcoholics and drug abusers. Places providing community-based care for drug and alcohol abusers include group homes, detoxification centers, quarterway houses (residential treatment facilities that work closely with accredited hospitals), halfway houses, and recovery homes for ambulatory, mentally competent recovering alcoholics and drug abusers who may be re-entering the work force.

Maternity Homes for Unwed Mothers—Includes persons with no usual home elsewhere in places that provide domestic care for unwed mothers and their children. These homes may provide social services and post-natal care within the facility, or

may make arrangements for women to receive such services in the community. Nursing services are usually available in the facility.

Other Group Homes—Includes persons with no usual home elsewhere in communes, foster care homes, and job corps centers with 10 or more unrelated persons. These types of places provide communal living quarters, generally for persons who have formed their own community in which they have common interests and often share or own property jointly.

Religious Group Quarters—Includes, primarily, group quarters for nuns teaching in parochial schools and for priests living in rectories. It also includes other convents and monasteries, except those associated with a general hospital or an institution.

College Quarters Off Campus—Includes privately-owned rooming and boarding houses off campus, if the place is reserved exclusively for occupancy by college students and if there are 10 or more unrelated persons. In census products, persons in this category are classified as living in a college dormitory.

Persons residing in certain other types of living arrangements are classified as living in "noninstitutional group quarters" regardless of the number of people sharing the unit. These include persons residing in the following types of group quarters:

College Dormitories—Includes college students in dormitories (provided the dormitory is restricted to students who do not have their families living with them), fraternity and sorority houses, and on-campus residential quarters used exclusively for those in religious orders who are attending college. Students in privately-owned rooming and boarding houses off campus are also included, if the place is reserved exclusively for occupancy by college-level students and if there are 10 or more unrelated persons.

Military Quarters—Includes military personnel living in barracks and dormitories on base, in transient quarters on base for temporary residents (both civilian and military), and on military ships. However, patients in military hospitals receiving treatment for chronic diseases or who had no usual home elsewhere, and persons being held in military stockades were included as part of the institutional population.

Agriculture Workers' Dormitories—Includes persons in migratory farm workers' camps on farms, bunkhouses for ranch hands, and other dormitories on farms, such as those on "tree farms."

Other Workers' Dormitories—Includes persons in logging camps, construction workers' camps, firehouse dormitories, job-training camps, energy enclaves (Alaska only), and nonfarm migratory workers' camps (for example, workers in mineral and mining camps).

Emergency Shelters for Homeless Persons (with sleeping facilities) and Visible in Street Locations—Includes persons enumerated during the "Shelter-and-Street-Night" operation primarily on March 20-21, 1990. Enumerators were instructed not to ask if a person was "homeless." If a person was at one of the locations below on March 20-21, the person was counted as described below. (For more information on the "Shelter-and-Street-Night" operation, see Appendix D, Collection and Processing Procedures.) This category is divided into four classifications:

Emergency Shelters for Homeless Persons (with sleeping facilities)—Includes persons who stayed overnight on March 20, 1990, in permanent and temporary emergency housing, missions, hotels/motels, and flophouses charging \$12 or less (excluding taxes) per night; Salvation Army shelters, hotels, and motels used *entirely* for homeless persons regardless of the nightly rate charged; rooms in hotels and motels used *partially* for the homeless; and similar places known to have persons who have no usual home elsewhere staying overnight. If not shown separately, shelters and group homes that provide *temporary* sleeping facilities for runaway, neglected, and homeless children are included in this category in data products.

Shelters for Runaway, Neglected, and Homeless Children—Includes shelters/group homes which provide *temporary* sleeping facilities for juveniles.

Visible in Street Locations—Includes street blocks and open public locations designated before March 20, 1990, by city and community officials as places where the homeless congregate at night. All persons found at predesignated street sites from 2 a.m. to 4 a.m. and leaving abandoned or boarded-up buildings from 4 a.m. to 8 a.m. on March 21, 1990, were enumerated during "street" enumeration, except persons in uniform such as police and persons engaged in obvious money-making activities other than begging or panhandling. Enumerators were instructed not to ask if a person was "homeless."

This cannot be considered a complete count of all persons living on the streets because those who were so well hidden that local people did not know where to find them were likely to have been missed as were persons moving about or in places not identified by local officials. It is also possible that persons with homes could have been included

in the count of "visible in street locations" if they were present when the enumerator did the enumeration of a particular block.

Predesignated street sites include street corners, parks, bridges, persons emerging from abandoned and boarded-up buildings, noncommercial campsites (tent cities), all-night movie theaters, all-night restaurants, emergency hospital waiting rooms, train stations, airports, bus depots, and subway stations.

Shelters for Abused Women (Shelters Against Domestic Violence or Family Crisis Centers)—Includes community-based homes or shelters that provide domiciliary care for women who have sought shelter from family violence and who may have been physically abused. Most shelters also provide care for children of abused women. These shelters may provide social services, meals, psychiatric treatment, and counseling. In some census products, "shelters for abused women" are included in the category "other noninstitutional group quarters."

Dormitories for Nurses and Interns in General and Military Hospitals—Includes group quarters for nurses and other staff members. It excludes patients.

Crews of Maritime Vessels—Includes officers, crew members, and passengers of maritime U.S. flag vessels. All ocean-going and Great Lakes ships are included.

Staff Residents of Institutions—Includes staff residing in group quarters on institutional grounds who provide formally-authorized, supervised care or custody for the institutionalized population.

Other Nonhousehold Living Situations—Includes persons with no usual home elsewhere enumerated during transient or "T-Night" enumeration at YMCA's, YWCA's, youth hostels, commercial and government-run campgrounds, campgrounds at racetracks, fairs, and carnivals, and similar transient sites.

Living Quarters for Victims of Natural Disasters—Includes living quarters for persons temporarily displaced by natural disasters.

Limitation of the Data—Two types of errors can occur in the classification of "types of group quarters":

1. **Misclassification of Group Quarters**—During the 1990 Special Place Prelist operation, the enumerator determined the type of group quarters associated with each special place in their assignment. The enumerator used the Alphabetical Group Quarters Code List and Index to the Alphabetical Group

Quarters Code List to assign a two-digit code number followed by either an "I," for institutional, or an "N," for noninstitutional to each group quarters. In 1990, unacceptable group quarter codes were edited. (For more information on editing of unacceptable data, see Appendix C, Accuracy of the Data.)

2. *No Classification (unknowns)*—The imputation rate for type of institution was higher in 1980 (23.5 percent) than in 1970 (3.3 percent). Improvements were made to the 1990 Alphabetical Group Quarters Code List; that is, the inclusion of more group quarters categories and an "Index to the Alphabetical Group Quarters Code List." (For more information on the allocation rates for Type of Institution, see the allocation rates in 1990 CP-1, *General Population Characteristics*.)

In previous censuses, allocation rates for demographic characteristics (such as age, sex, race, and marital status) of the institutional population were similar to those for the total population. The allocation rates for sample characteristics such as school enrollment, highest grade completed, income, and veteran status for the institutional and noninstitutional group quarters population have been substantially higher than the population in households at least as far back as the 1960 census. The data, however, have historically presented a reasonable picture of the institutional and noninstitutional group quarters population.

Shelter and Street Night (S-Night)—For the 1990 census "Shelter-and-Street-Night" operation, persons well hidden, moving about, or in locations enumerators did not visit were likely to be missed. The number of people missed will never be known; thus, the 1990 census cannot be considered to include a definitive count of America's total homeless population. It does, however, give an idea of relative differences among areas of the country. Other components were counted as part of regular census procedures.

The count of persons in shelters and visible on the street could have been affected by many factors. How much the factors affected the count can never be answered definitively, but some elements include:

1. How well enumerators were trained and how well they followed procedures.
2. How well the list of shelter and street locations given to the Census Bureau by the local government reflected the actual places that homeless persons stay at night.
3. Cities were encouraged to open temporary shelters for census night, and many did that and actively encouraged people to enter the shelters. Thus,

people who may have been on the street otherwise were in shelters the night of March 20, so that the ratio of shelter-to-street population could be different than usual.

4. The weather, which was unusually cold in some parts of the country, could affect how likely people were to seek emergency shelter or to be more hidden than usual if they stayed outdoors.
5. The media occasionally interfered with the ability to do the count.
6. How homeless people perceived the census and whether they wanted to be counted or feared the census and hid from it.

The Census Bureau conducted two assessments of Shelter and Street Night: (1) the quality of the lists of shelters used for the Shelter-and-Street-Night operation, and (2) how well procedures were followed by census-takers for the street count in parts of five cities (Chicago, Los Angeles, New Orleans, New York, and Phoenix). Information about these two assessments is available from the Chief, Center for Survey Methods Research, Bureau of the Census, Washington, DC 20233.

Comparability—For the 1990 census, the definition of institutionalized persons was revised so that the definition of "care" only includes persons under organized medical or formally-authorized, supervised care or custody. As a result of this change to the institutional definition, maternity homes are classified as noninstitutional rather than institutional group quarters as in previous censuses. The following types of other group quarters are classified as institutional rather than noninstitutional group quarters: "halfway houses (operated for correctional purposes)" and "wards in general and military hospitals for patients who have no usual home elsewhere," which includes maternity, neonatal, pediatric, military, and surgical wards of hospitals, other-purpose wards of hospitals, and wards for infectious diseases. These changes should not significantly affect the comparability of data with earlier censuses because of the relatively small number of persons involved.

As in 1980, 10 or more unrelated persons living together were classified as living in noninstitutional group quarters. In 1970, the criteria was six or more unrelated persons.

Several changes also have occurred in the identification of specific types of group quarters. For the first time, the 1990 census identifies separately the following types of correctional institutions: persons in halfway houses (operated for correctional purposes), military stockades and jails, and police lockups. In 1990, tuberculosis hospitals or wards are included with hospitals for the chronically ill; in 1980, they were shown separately. For 1990, the noninstitutional group quarters category,

"Group homes" is further classified as: group homes for drug/alcohol abuse; maternity homes (for unwed mothers), group homes for the mentally ill, group homes for the mentally retarded, and group homes for the physically handicapped. Persons living in communes, foster-care homes, and job corps centers are classified with "Other group homes" only if 10 or more unrelated persons share the unit; otherwise, they are classified as housing units.

In 1990, workers' dormitories were classified as group quarters regardless of the number of persons sharing the dorm. In 1980, 10 or more unrelated persons had to share the dorm for it to be classified as a group quarters. In 1960, data on persons in military barracks were shown only for men. In subsequent censuses, they include both men and women.

In 1990 census data products, the phrase "inmates of institutions" was changed to "institutionalized persons." Also, persons living in noninstitutional group quarters were referred to as "other persons in group quarters," and the phrase "staff residents" was used for staff living in institutions.

In 1990, there are additional institutional categories and noninstitutional group quarters categories compared with the 1980 census. The institutional categories added include "hospitals and wards for drug/alcohol abuse" and "military hospitals for the chronically ill." The noninstitutional group quarters categories added include emergency shelters for homeless persons; shelters for runaway, neglected, and homeless children; shelters for abused women; and visible-in-street locations. Each of these noninstitutional group quarters categories was enumerated on March 20-21, 1990, during the "Shelter-and-Street-Night" operation. (For more information on the "Shelter-and-Street-Night" operation, see Appendix D, Collection and Processing Procedures.)

JOURNEY TO WORK

Place of Work

The data on place of work were derived from answers to questionnaire item 22, which was asked of persons who indicated in question 21 that they worked at some time during the reference week. (For more information, see discussion under "Reference Week.")

Data were tabulated for workers 16 years and over; that is, members of the Armed Forces and civilians who were at work during the reference week. Data on place of work refer to the geographic location at which workers carried out their occupational activities during the reference week. The exact address (number and street) of the place of work was asked, as well as the place (city, town, or post office); whether or not the place of work was inside or outside the limits of that city or town; and the county, State, and ZIP Code. If the

person's employer operated in more than one location, the exact address of the location or branch where the respondent worked was requested. When the number and street name were unknown, a description of the location, such as the building name or nearest street or intersection, was to be entered.

Persons who worked at more than one location during the reference week were asked to report the one at which they worked the greatest number of hours. Persons who regularly worked in several locations each day during the reference week were requested to give the address at which they began work each day. For cases in which daily work did not begin at a central place each day, the person was asked to provide as much information as possible to describe the area in which he or she worked most during the reference week.

In some tabulations, place-of-work locations may be defined as "in area of residence" and "outside area of residence." The area of residence may vary from table to table or even within a table, and refers to the particular area or areas shown. For example, in a table that provides data for counties, "in area of residence" refers to persons who worked in the same county in which they lived, while "outside area of residence" refers to persons whose workplace was located in a county different from the one in which they lived. Similarly, in a table that provides data for several types of areas, such as the State and its individual metropolitan areas (MA's), counties, and places, the place-of-work data will be variable and is determined by the geographic level (State, MA, county, or place) shown in each section of the tabulation.

In tabulations that present data for States, workplaces for the residents of the State may include, in addition to the State itself, each contiguous State. The category, "in noncontiguous State or abroad," includes persons who worked in a State that did not border their State of residence as well as persons who worked outside the United States.

In tabulations that present data for an MSA/PMSA, place-of-work locations are specified to show the main destinations of workers living in the MSA/PMSA. (For more information on metropolitan areas (MA's), see Appendix A, Area Classifications.) All place-of-work locations are identified with respect to the boundaries of the MSA/PMSA as "inside MSA/PMSA" or "outside MSA/PMSA." Locations within the MSA/PMSA are further divided into each central city, and each county or county balance. Selected large incorporated places also may be specified as places of work.

Within New England MSA/PMSA's, the places of work presented generally are cities and towns. Locations outside the MSA/PMSA are specified if they are important commuting destinations for residents of the MSA/PMSA, and may include adjoining MSA/PMSA's and their central cities, their component counties, large

incorporated places, or counties, cities, or other geographic areas outside any MA. In tabulations for MSA/PMSA's in New England; Honolulu, Hawaii; and certain other MA's, some place-of-work locations are identified as "areas" (e.g., Area 1, Area 5, Area 12, etc.). Such areas consist of groups of towns, cities, census designated places (Honolulu MSA only), or counties that have been identified as unique place-of-work destinations. When an adjoining MSA/PMSA or MSA/PMSA remainder is specified as a place-of-work location, its components are not defined. However, the components are presented in the 1990 CP-1, *General Population Characteristics for Metropolitan Areas* and the 1990 CH-1, *General Housing Characteristics for Metropolitan Areas* reports. In tabulations that present data for census tracts outside MA's, place-of-work locations are defined as "in county of residence" and "outside county of residence."

In areas where the workplace address was coded to the block level, persons were tabulated as working inside or outside a specific place based on the location of that address, regardless of the response to question 22c concerning city/town limits. In areas where it was impossible to code the workplace address to the block level, persons were tabulated as working in a place if a place name was reported in question 22b and the response to question 22c was either "Yes" or the item was left blank. In selected areas, census designated places (CDP's) may appear in the tabulations as places of work. The accuracy of place-of-work data for CDP's may be affected by the extent to which their census names were familiar to respondents, and by coding problems caused by similarities between the CDP name and the names of other geographic jurisdictions in the same vicinity.

Place-of-work data are given for selected minor civil divisions (generally, cities, towns, and townships) in the nine Northeastern States, based on the responses to the place-of-work question. Many towns and townships are regarded locally as equivalent to a place and therefore, were reported as the place of work. When a respondent reported a locality or incorporated place that formed a part of a township or town, the coding and tabulating procedure was designed to include the response in the total for the township or town. The accuracy of the place-of-work data for minor civil divisions is greatest for the New England States. However, the data for some New England towns, for towns in New York, and for townships in New Jersey and Pennsylvania may be affected by coding problems that resulted from the unfamiliarity of the respondent with the minor civil division in which the workplace was located or when a township and a city or borough of the same or similar name are located close together.

Place-of-work data may show a few workers who made unlikely daily work trips (e.g., workers who lived in New York and worked in California). This result is attributable to persons who worked during the reference

week at a location that was different from their usual place of work, such as persons away from home on business.

Comparability—The wording of the question on place of work was substantially the same in the 1990 census as it was in 1980. However, data on place of work from the 1990 census are based on the full census sample, while data from the 1980 census were based on only about one-half of the full sample.

For the 1980 census, nonresponse or incomplete responses to the place-of-work question were not allocated, resulting in the use of "not reported" categories in the 1980 publications. However, for the 1990 census, when place of work was not reported or the response was incomplete, a work location was allocated to the person based on their means of transportation to work, travel time to work, industry, and location of residence and workplace of others. The 1990 publications, therefore, do not contain a "not reported" category for the place-of-work data.

Comparisons between 1980 and 1990 census data on the gross number of workers in particular commuting flows, or the total number of persons working in an area, should be made with extreme caution. Any apparent increase in the magnitude of the gross numbers may be due solely to the fact that for 1990 the "not reported" cases have been distributed among specific place-of-work destinations, instead of tallied in a separate category as in 1980.

Limitation of the Data—The data on place of work relate to a reference week; that is, the calendar week preceding the date on which the respondents completed their questionnaires or were interviewed by enumerators. This week is not the same for all respondents because the enumeration was not completed in 1 week. However, for the majority of persons, the reference week for the 1990 census is the last week in March 1990. The lack of a uniform reference week means that the place-of-work data reported in the census will not exactly match the distribution of workplace locations observed or measured during an actual workweek.

The place-of-work data are estimates of persons 16 years old and over who were both employed and at work during the reference week (including persons in the Armed Forces). Persons who did not work during the reference week but had jobs or businesses from which they were temporarily absent due to illness, bad weather, industrial dispute, vacation, or other personal reasons are not included in the place-of-work data. Therefore, the data on place of work understate the total number of jobs or total employment in a geographic area during the reference week. It also should be noted that persons who had irregular, casual, or unstructured jobs during the reference week may have erroneously reported themselves as not working.

The address where the individual worked most often during the reference week was recorded on the census questionnaire. If a worker held two jobs, only data about the primary job (the one worked the greatest number of hours during the preceding week) was requested. Persons who regularly worked in several locations during the reference week were requested to give the address at which they began work each day. For cases in which daily work was not begun at a central place each day, the person was asked to provide as much information as possible to describe the area in which he or she worked most during the reference week.

Means of Transportation to Work

The data on means of transportation to work were derived from answers to questionnaire item 23a, which was asked of persons who indicated in question 21 that they worked at some time during the reference week. (For more information, see discussion under "Reference Week.") Means of transportation to work refers to the principal mode of travel or type of conveyance that the person usually used to get from home to work during the reference week.

Persons who used different means of transportation on different days of the week were asked to specify the one they used most often, that is, the greatest number of days. Persons who used more than one means of transportation to get to work each day were asked to report the one used for the longest distance during the work trip. The category, "Car, truck, or van," includes workers using a car (including company cars but excluding taxicabs), a truck of one-ton capacity or less, or a van. The category, "Public transportation," includes workers who used a bus or trolley bus, streetcar or trolley car, subway or elevated, railroad, ferryboat, or taxicab even if each mode is not shown separately in the tabulation. The category, "Other means," includes workers who used a mode of travel which is not identified separately within the data distribution. The category, "Other means," may vary from table to table, depending on the amount of detail shown in a particular distribution.

The means of transportation data for some areas may show workers using modes of public transportation that are not available in those areas (e.g., subway or elevated riders in an MA where there actually is no subway or elevated service). This result is largely due to persons who worked during the reference week at a location that was different from their usual place of work (such as persons away from home on business in an area where subway service was available) and persons who used more than one means of transportation each day but whose principal means was unavailable where they lived (for example, residents of nonmetropolitan areas who drove to the fringe of an MA and took the commuter railroad most of the distance to work).

Private Vehicle Occupancy

The data on private vehicle occupancy were derived from answers to questionnaire item 23b. This question was asked of persons who indicated in question 21 that they worked at some time during the reference week and who reported in question 23a that their means of transportation to work was "Car, truck, or van." (For more information, see discussion under "Reference Week.")

Private vehicle occupancy refers to the number of persons who usually rode to work in the vehicle during the reference week. The category, "Drove alone," includes persons who usually drove alone to work as well as persons who were driven to work by someone who then drove back home or to a nonwork destination. The category, "Carpooled," includes workers who reported that two or more persons usually rode to work in the vehicle during the reference week.

Persons Per Car, Truck, or Van—This is obtained by dividing the number of persons who reported using a car, truck, or van to get to work by the number of such vehicles that they used. The number of vehicles used is derived by counting each person who drove alone as one vehicle, each person who reported being in a two-person carpool as one-half vehicle, each person who reported being in a three-person carpool as one-third vehicle, and so on, and then summing all the vehicles.

Time Leaving Home to Go to Work

The data on time leaving home to go to work were derived from answers to questionnaire item 24a. This question was asked of persons who indicated in question 21 that they worked at some time during the reference week and who reported in question 23a that they worked outside their home. The departure time refers to the time of day that the person usually left home to go to work during the reference week. (For more information, see discussion under "Reference Week.")

Travel Time to Work

The data on travel time to work were derived from answers to questionnaire item 24b. This question was asked of persons who indicated in question 21 that they worked at some time during the reference week and who reported in question 23a that they worked outside their home. Travel time to work refers to the total number of minutes that it usually took the person to get from home to work during the reference week. The elapsed time includes time spent waiting for public transportation, picking up passengers in carpools, and time spent in other activities related to getting to work. (For more information, see discussion under "Reference Week.")

REFERENCE WEEK

The data on labor force status and journey to work were related to the reference week; that is, the calendar week preceding the date on which the respondents completed their questionnaires or were interviewed by enumerators. This week is not the same for all respondents since the enumeration was not completed in one week. The occurrence of holidays during the enumeration period could affect the data on actual hours worked during the reference week, but probably had no effect on overall measurement of employment status (see the discussion below on "Comparability").

Comparability—The reference weeks for the 1990 and 1980 censuses differ in that Passover and Good Friday occurred in the first week of April 1980, but in the second week of April 1990. Many workers presumably took time off for those observances. The differing occurrence of these holidays could affect the comparability of the 1990 and 1980 data on actual hours worked for some areas if the respective weeks were the reference weeks for a significant number of persons. The holidays probably did not affect the overall measurement of employment status since this information was based on work activity during the entire reference week.

APPENDIX C.

Accuracy of the Data

CONTENTS

Confidentiality of the Data	C-2
Editing of Unacceptable Data	C-9
Errors in the Data	C-2
Estimation Procedure	C-5
Sample Design	C-1

INTRODUCTION

The data contained in this data product are based on the 1990 census sample. The data are estimates of the actual figures that would have been obtained from a complete count. Estimates derived from a sample are expected to be different from the 100-percent figures because they are subject to sampling and nonsampling errors. Sampling error in data arises from the selection of persons and housing units to be included in the sample. Nonsampling error affects both sample and 100-percent data, and is introduced as a result of errors that may occur during the collection and processing phases of the census. Provided below is a detailed discussion of both types of errors and a description of the estimation procedures.

SAMPLE DESIGN

Every person and housing unit in the United States was asked certain basic demographic and housing questions (for example, race, age, marital status, housing value, or rent). A sample of these persons and housing units was asked more detailed questions about such items as income, occupation, and housing costs in addition to the basic demographic and housing information. The primary sampling unit for the 1990 census was the housing unit, including all occupants. For persons living in group quarters, the sampling unit was the person. Persons in group quarters were sampled at a 1-in-6 rate.

The sample designation method depended on the data collection procedures. Approximately 95 percent of the population was enumerated by the mailback procedure. In these areas, the Bureau of the Census either purchased a commercial mailing list, which was updated by the United States Postal Service and Census Bureau field staff, or prepared a mailing list by canvassing and listing each address in the area prior to Census Day. These lists were computerized and the appropriate units

were electronically designated as sample units. The questionnaires were either mailed or hand-delivered to the addresses with instructions to complete and mail back the form.

Housing units in governmental units with a precensus (1988) estimated population of fewer than 2,500 persons were sampled at 1-in-2. Governmental units were defined for sampling purposes as all incorporated places, all counties, all county equivalents such as parishes in Louisiana, and all minor civil divisions in Connecticut, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Wisconsin. Housing units in census tracts and block numbering areas (BNA's) with a precensus housing unit count below 2,000 housing units were sampled at 1-in-6 for those portions not in small governmental units (governmental units with a population less than 2,500). Housing units within census tracts and BNA's with 2,000 or more housing units were sampled at 1-in-8 for those portions not in small governmental units.

In list/enumerate areas (about 5 percent of the population), each enumerator was given a blank address register with designated sample lines. Beginning about Census Day, the enumerator systematically canvassed an assigned area and listed all housing units in the address register in the order they were encountered. Completed questionnaires, including sample information for any housing unit listed on a designated sample line, were collected. For all governmental units with fewer than 2,500 persons in list/enumerate areas, a 1-in-2 sampling rate was used. All other list/enumerate areas were sampled at 1-in-6.

Housing units in American Indian reservations, tribal jurisdiction statistical areas, and Alaska Native villages were sampled according to the same criteria as other governmental units, except the sampling rates were based on the size of the American Indian and Alaska Native population in those areas as measured in the 1980 census. Trust lands were sampled at the same rate as their associated American Indian reservations. Census designated places in Hawaii were sampled at the same rate as governmental units because the Census Bureau does not recognize incorporated places in Hawaii.

The purpose of using variable sampling rates was to provide relatively more reliable estimates for small areas and decrease respondent burden in more densely populated areas while maintaining data reliability. When all sampling rates were taken into account across the

Nation, approximately one out of every six housing units in the Nation was included in the 1990 census sample.

CONFIDENTIALITY OF THE DATA

To maintain the confidentiality required by law (Title 13, United States Code), the Bureau of the Census applies a confidentiality edit to the 1990 census data to assure that published data do not disclose information about specific individuals, households, or housing units. As a result, a small amount of uncertainty is introduced into the estimates of census characteristics. The sample itself provides adequate protection for most areas for which sample data are published since the resulting data are estimates of the actual counts; however, small areas require more protection. The edit is controlled so that the basic structure of the data is preserved.

The confidentiality edit is implemented by selecting a small subset of individual households from the internal sample data files and blanking a subset of the data items on these household records. Responses to those data items were then imputed using the same imputation procedures that were used for nonresponse. A larger subset of households is selected for the confidentiality edit for small areas to provide greater protection for these areas. The editing process is implemented in such a way that the quality and usefulness of the data were preserved.

ERRORS IN THE DATA

Since statistics in this data product are based on a sample, they may differ somewhat from 100-percent figures that would have been obtained if all housing units, persons within those housing units, and persons living in group quarters had been enumerated using the same questionnaires, instructions, enumerators, etc. The sample estimate also would differ from other samples of housing units, persons within those housing units, and persons living in group quarters. The deviation of a sample estimate from the average of all possible samples is called the sampling error. The standard error of a sample estimate is a measure of the variation among the estimates from all the possible samples and thus is a measure of the precision with which an estimate from a particular sample approximates the average result of all possible samples. The sample estimate and its estimated standard error permit the construction of interval estimates with prescribed confidence that the interval includes the average result of all possible samples. Described below is the method of calculating standard errors and confidence intervals for the data in this product.

In addition to the variability which arises from the sampling procedures, both sample data and 100-percent data are subject to nonsampling error. Nonsampling

error may be introduced during any of the various complex operations used to collect and process census data. For example, operations such as editing, reviewing, or handling questionnaires may introduce error into the data. A detailed discussion of the sources of nonsampling error is given in the section on "Control of Nonsampling Error" in this appendix.

Nonsampling error may affect the data in two ways. Errors that are introduced randomly will increase the variability of the data and should therefore be reflected in the standard error. Errors that tend to be consistent in one direction will make both sample and 100-percent data biased in that direction. For example, if respondents consistently tend to under-report their income, then the resulting counts of households or families by income category will tend to be understated for the higher income categories and overstated for the lower income categories. Such biases are not reflected in the standard error.

Calculation of Standard Errors

Totals and Percentages—Tables A through C in this appendix contain the information necessary to calculate the standard errors of sample estimates in this data product. To calculate the standard error, it is necessary to know the basic standard error for the characteristic (given in table A or B) that would result under a simple random sample design (of persons, households, or housing units) and estimation technique; the design factor for the particular characteristic estimated (given in table C); and the number of persons or housing units in the tabulation area and the percent of these in the sample. For machine-readable products, the percent-in-sample is included in a data matrix on the file for each tabulation area. In printed reports, the percent-in-sample is provided in data tables at the end of the statistical tables that compose the report. The design factors reflect the effects of the actual sample design and complex ratio estimation procedure used for the 1990 census.

The steps given below should be used to calculate the standard error of an estimate of a total or a percentage contained in this product. A percentage is defined here as a ratio of a numerator to a denominator where the numerator is a subset of the denominator. For example, the proportion of Black teachers is the ratio of Black teachers to all teachers.

1. Obtain the standard error from table A or B (or use the formula given below the table) for the estimated total or percentage, respectively.
2. Find the geographic area to which the estimate applies in the appropriate percent-in-sample table or appropriate matrix, and obtain the person or housing unit "percent-in-sample" figure for this

area. Use the person "percent-in-sample" figure for person and family characteristics. Use the housing unit "percent-in-sample" figure for housing unit characteristics.

3. Use table C to obtain the design factor for the characteristic (for example, employment status, school enrollment) and the range that contains the percent-in-sample with which you are working. Multiply the basic standard error by this factor.

The unadjusted standard errors of zero estimates or of very small estimated totals or percentages will approach zero. This is also the case for very large percentages or estimated totals that are close to the size of the tabulation areas to which they correspond. Nevertheless, these estimated totals and percentages still are subject to sampling and nonsampling variability, and an estimated standard error of zero (or a very small standard error) is not appropriate. For estimated percentages that are less than 2 or greater than 98, use the basic standard errors in table B that appear in the "2 or 98" row. For an estimated total that is less than 50 or within 50 of the total size of the tabulation area, use a basic standard error of 16.

An illustration of the use of the tables is given in the section entitled "Use of Tables to Compute Standard Errors."

Sums and Differences—The standard errors estimated from these tables are not directly applicable to sums of and differences between two sample estimates. To estimate the standard error of a sum or difference, the tables are to be used somewhat differently in the following three situations:

1. For the sum of or difference between a sample estimate and a 100-percent value, use the standard error of the sample estimate. The complete count value is not subject to sampling error.
2. For the sum of or difference between two sample estimates, the appropriate standard error is approximately the square root of the sum of the two individual standard errors squared; that is, for standard errors:

$SE_{\hat{X}}$ and $SE_{\hat{Y}}$ of estimates \hat{X} and \hat{Y} :

$$SE_{(\hat{X} \pm \hat{Y})} = SE_{(\hat{X} - \hat{Y})} = \sqrt{(SE_{\hat{X}})^2 + (SE_{\hat{Y}})^2}$$

This method, however, will underestimate (overestimate) the standard error if the two items in a sum are highly positively (negatively) correlated or if the two items in a difference are highly negatively (positively) correlated. This method may also be used for the difference between (or sum of) sample estimates from two censuses or from a census sample and another survey. The

standard error for estimates not based on the 1990 census sample must be obtained from an appropriate source outside of this appendix.

3. For the differences between two estimates, one of which is a subclass of the other, use the tables directly where the calculated difference is the estimate of interest. For example, to determine the estimate of non-Black teachers, one may subtract the estimate of Black teachers from the estimate of total teachers. To determine the standard error of the estimate of non-Black teachers apply the above formula directly.

Ratios—Frequently, the statistic of interest is the ratio of two variables, where the numerator is not a subset of the denominator. For example, the ratio of teachers to students in public elementary schools. The standard error of the ratio between two sample estimates is estimated as follows:

1. If the ratio is a proportion, then follow the procedure outlined for "Totals and Percentages."
2. If the ratio is not a proportion, then approximate the standard error using the formula below.

$$SE_{(\hat{X}/\hat{Y})} = \frac{\hat{X}}{\hat{Y}} \sqrt{\frac{(SE_{\hat{X}})^2}{\hat{X}^2} + \frac{(SE_{\hat{Y}})^2}{\hat{Y}^2}}$$

Medians—For the standard error of the median of a characteristic, it is necessary to examine the distribution from which the median is derived, as the size of the base and the distribution itself affect the standard error. An approximate method is given here. As the first step, compute one-half of the number on which the median is based (refer to this result as $N/2$). Treat $N/2$ as if it were an ordinary estimate and obtain its standard error as instructed above. Compute the desired confidence interval about $N/2$. Starting with the lowest value of the characteristic, cumulate the frequencies in each category of the characteristic until the sum equals or first exceeds the lower limit of the confidence interval about $N/2$. By linear interpolation, obtain a value of the characteristic corresponding to this sum. This is the lower limit of the confidence interval of the median. In a similar manner, continue cumulating frequencies until the sum equals or exceeds the count in excess of the upper limit of the interval about $N/2$. Interpolate as before to obtain the upper limit of the confidence interval for the estimated median.

When interpolation is required in the upper open-ended interval of a distribution to obtain a confidence bound, use 1.5 times the lower limit of the open-ended confidence interval as the upper limit of the open-ended interval.

Confidence Intervals

A sample estimate and its estimated standard error may be used to construct confidence intervals about the estimate. These intervals are ranges that will contain

the average value of the estimated characteristic that results over all possible samples, with a known probability. For example, if all possible samples that could result under the 1990 census sample design were independently selected and surveyed under the same conditions, and if the estimate and its estimated standard error were calculated for each of these samples, then:

1. Approximately 68 percent of the intervals from one estimated standard error below the estimate to one estimated standard error above the estimate would contain the average result from all possible samples;
2. Approximately 90 percent of the intervals from 1.645 times the estimated standard error below the estimate to 1.645 times the estimated standard error above the estimate would contain the average result from all possible samples.
3. Approximately 95 percent of the intervals from two estimated standard errors below the estimate to two estimated standard errors above the estimate would contain the average result from all possible samples.

The intervals are referred to as 68 percent, 90 percent, and 95 percent confidence intervals, respectively.

The average value of the estimated characteristic that could be derived from all possible samples is or is not contained in any particular computed interval. Thus, we cannot make the statement that the average value has a certain probability of falling between the limits of the calculated confidence interval. Rather, one can say with a specified probability of confidence that the calculated confidence interval includes the average estimate from all possible samples (approximately the 100-percent value).

Confidence intervals also may be constructed for the ratio, sum of, or difference between two sample figures. This is done by first computing the ratio, sum, or difference, then obtaining the standard error of the ratio, sum, or difference (using the formulas given earlier), and finally forming a confidence interval for this estimated ratio, sum, or difference as above. One can then say with specified confidence that this interval includes the ratio, sum, or difference that would have been obtained by averaging the results from all possible samples.

The estimated standard errors given in this appendix do not include all portions of the variability due to nonsampling error that may be present in the data. The standard errors reflect the effect of simple response variance, but not the effect of correlated errors introduced by enumerators, coders, or other field or processing personnel. Thus, the standard errors calculated represent a lower bound of the total error. As a result,

confidence intervals formed using these estimated standard errors may not meet the stated levels of confidence (i.e., 68, 90, or 95 percent). Thus, some care must be exercised in the interpretation of the data in this data product based on the estimated standard errors.

A standard sampling theory text should be helpful if the user needs more information about confidence intervals and nonsampling errors.

Use of Tables to Compute Standard Errors

The following is a hypothetical example of how to compute a standard error of a total and a percentage. Suppose a particular data table shows that for City A 9,948 persons out of all 15,888 persons age 16 years and over were in the civilian labor force. The percent-in-sample table lists City A with a percent-in-sample of 16.0 percent (Persons column). The column in table C which includes 16.0 percent-in-sample shows the design factor to be 1.1 for "Employment status."

The basic standard error for the estimated total 9,948 may be obtained from table A or from the formula given below table A. In order to avoid interpolation, the use of the formula will be demonstrated here. Suppose that the total population of City A was 21,220. The formula for the basic standard error, SE, is

$$SE(9,948) = \sqrt{5(9,948) (1 - 9,948 / 21,220)}$$

$$= 163 \text{ persons.}$$

The standard error of the estimated 9,948 persons 16 years and over who were in the civilian labor force is found by multiplying the basic standard error 163 by the design factor, 1.1 from table C. This yields an estimated standard error of 179 for the total number of persons 16 years and over in City A who were in the civilian labor force.

The estimated percent of persons 16 years and over who were in the civilian labor force in City A is 62.6. From table B, the unadjusted standard error is found to be approximately 0.85 percentage points. The standard error for the estimated 62.6 percent of persons 16 years and over who were in the civilian labor force is $0.85 \times 1.1 = 0.94$ percentage points.

A note of caution concerning numerical values is necessary. Standard errors of percentages derived in this manner are approximate. Calculations can be expressed to several decimal places, but to do so would indicate more precision in the data than is justifiable. Final results should contain no more than two decimal places when the estimated standard error is one percentage point (i.e., 1.00) or more.

In the previous example, the standard error of the 9,948 persons 16 years and over in City A who were in the civilian labor force was found to be 179. Thus, a 90

percent confidence interval for this estimated total is found to be:

$$[9,948 - 1.645(179)] \text{ to } [9,948 + 1.645(179)]$$

or

$$9,654 \text{ to } 10,242$$

One can say, with about 90 percent confidence, that this interval includes the value that would have been obtained by averaging the results from all possible samples.

The following is an illustration of the calculation of standard errors and confidence intervals when a difference between two sample estimates is obtained. For example, suppose the number of persons in City B age 16 years and over who were in the civilian labor force was 9,314 and the total number of persons 16 years and over was 16,666. Further suppose the population of City B was 25,225. Thus, the estimated percentage of persons 16 years and over who were in the civilian labor force is 55.9 percent. The unadjusted standard error determined using the formula provided at the bottom of table B is 0.86 percentage points. We find that City B had a percent-in-sample of 15.7. The range which includes 15.7 percent-in-sample in table C shows the design factor to be 1.1 for "Employment Status." Thus, the approximate standard error of the percentage (55.9 percent) is $0.86 \times 1.1 = 0.95$ percentage points.

Now suppose that one wished to obtain the standard error of the difference between City A and City B of the percentages of persons who were 16 years and over and who were in the civilian labor force. The difference in the percentages of interest for the two cities is:

$$62.6 - 55.9 = 6.7 \text{ percent.}$$

Using the results of the previous example:

$$SE(6.7) = \sqrt{(SE(62.6))^2 + (SE(55.9))^2} = \sqrt{(0.94)^2 + (0.95)^2}$$

$$= 1.34 \text{ percentage points}$$

The 90 percent confidence interval for the difference is formed as before:

$$[6.70 - 1.645(1.34)] \text{ to } [6.70 + 1.645(1.34)]$$

or

$$4.50 \text{ to } 8.90$$

One can say with 90 percent confidence that the interval includes the difference that would have been obtained by averaging the results from all possible samples.

For reasonably large samples, ratio estimates are normally distributed, particularly for the census population. Therefore, if we can calculate the standard error of a ratio estimate then we can form a confidence interval around the ratio. Suppose that one wished to obtain the standard error of the ratio of the estimate of persons who were 16 years and over and who were in the civilian

labor force in City A to the estimate of persons who were 16 years and over and who were in the civilian labor force in City B. The ratio of the two estimates of interest is:

$$9948/9314 = 1.07$$

$$SE(1.07) = \left(\frac{9948}{9314} \right) \sqrt{\frac{179^2}{(9948)^2} + \frac{188^2}{(9314)^2}}$$

$$= .029$$

Using the results above, the 90 percent confidence interval for this ratio would be:

$$[1.07 - 1.645(.029)] \text{ to } [1.07 + 1.645(.029)]$$

or

$$1.02 \text{ to } 1.12$$

ESTIMATION PROCEDURE

The estimates which appear in this publication were obtained from an iterative ratio estimation procedure (iterative proportional fitting) resulting in the assignment of a weight to each sample person or housing unit record. For any given tabulation area, a characteristic total was estimated by summing the weights assigned to the persons or housing units possessing the characteristic in the tabulation area. Estimates of family or household characteristics were based on the weight assigned to the family member designated as householder. Each sample person or housing unit record was assigned exactly one weight to be used to produce estimates of all characteristics. For example, if the weight given to a sample person or housing unit had the value 6, all characteristics of that person or housing unit would be tabulated with the weight of 6. The estimation procedure, however, did assign weights varying from person to person or housing unit to housing unit. The estimation procedure used to assign the weights was performed in geographically defined "weighting areas." Weighting areas generally were formed of contiguous geographic units which agreed closely with census tabulation areas within counties. Weighting areas were required to have a minimum sample of 400 persons. Weighting areas never crossed State or county boundaries. In small counties with a sample count below 400 persons, the minimum required sample condition was relaxed to permit the entire county to become a weighting area.

Within a weighting area, the ratio estimation procedure for persons was performed in four stages. For persons, the first stage applied 17 household-type groups. The second stage used two groups: sampling rate of 1-in-2; sampling rate less than 1-in-2. The third stage used the dichotomy householders/nonhouseholders. The fourth stage applied 180 aggregate age-sex-race-Hispanic origin categories. The stages were as follows:

PERSONS

STAGE I: TYPE OF HOUSEHOLD

Group	Persons in Housing Units With a Family With Own Children Under 18
1	2 persons in housing unit
2	3 persons in housing unit
3	4 persons in housing unit
4	5 to 7 persons in housing unit
5	8 or more persons in housing unit
	Persons in Housing Units With a Family Without Own Children Under 18
6-10	2 through 8 or more persons in housing unit
	Persons in All Other Housing Units
11	1 person in housing unit
12-16	2 through 8 or more persons in housing unit
	Persons in Group Quarters
17	Persons in Group Quarters

STAGE II: SAMPLING RATES

1	Sampling rate of 1-in-2
2	Sampling rate less than 1-in-2

STAGE III: HOUSEHOLDER/NONHOUSEHOLDER

1	Householder
2	Nonhouseholder

STAGE IV: AGE/SEX/RACE/HISPANIC ORIGIN

Group	White
	Persons of Hispanic Origin
	Male
1	0 to 4 years
2	5 to 14 years
3	15 to 19 years
4	20 to 24 years
5	25 to 34 years
6	35 to 54 years
7	55 to 64 years
8	65 to 74 years
9	75 years and over
	Female
10-18	Same age categories as groups 1 through 9.
	Persons Not of Hispanic Origin
19-36	Same sex and age categories as groups 1 through 18.
	Black
37-72	Same age/sex/Hispanic origin categories as groups 1 through 36.

STAGE II: SAMPLING RATES

	Asian or Pacific Islander
73-108	Same age/sex/Hispanic origin categories as groups 1 through 36.
	American Indian, Eskimo, or Aleut
109-144	Same age/sex/Hispanic origin categories as groups 1 through 36.
	Other Race (includes those races not listed above)
145-180	Same age/sex/Hispanic origin categories as groups 1 through 36.

Within a weighting area, the first step in the estimation procedure was to assign an initial weight to each sample person record. This weight was approximately equal to the inverse of the probability of selecting a person for the census sample.

The next step in the estimation procedure, prior to iterative proportional fitting, was to combine categories in each of the four estimation stages, when needed to increase the reliability of the ratio estimation procedure. For each stage, any group that did not meet certain criteria for the unweighted sample count or for the ratio of the 100-percent to the initially weighted sample count, was combined, or collapsed, with another group in the same stage according to a specified collapsing pattern. At the fourth stage, an additional criterion concerning the number of complete count persons in each race/Hispanic origin category was applied.

As the final step, the initial weights underwent four stages of ratio adjustment applying the grouping procedures described above. At the first stage, the ratio of the complete census count to the sum of the initial weights for each sample person was computed for each stage I group. The initial weight assigned to each person in a group was then multiplied by the stage I group ratio to produce an adjusted weight.

In stage II, the stage I adjusted weights were again adjusted by the ratio of the complete census count to the sum of the stage I weights for sample persons in each stage II group. Next, at stage III, the stage II weights were adjusted by the ratio of the complete census count to the sum of the stage II weights for sample persons in each stage III group. Finally, at stage IV, the stage III weights were adjusted by the ratio of the complete census count to the sum of the stage III weights for sample persons in each stage IV group. The four stages of ratio adjustment were performed two times (two iterations) in the order given above. The weights obtained from the second iteration for stage IV were assigned to the sample person records. However, to avoid complications in rounding for tabulated data, only whole number weights were assigned. For example, if the final weight of the persons in a particular group was 7.25 then 1/4 of the sample persons in this group were randomly assigned a weight of 8, while the remaining 3/4 received a weight of 7.

The ratio estimation procedure for housing units was essentially the same as that for persons, except that vacant units were treated differently. The occupied housing unit ratio estimation procedure was done in four stages, and the vacant housing unit ratio estimation procedure was done in a single stage. The first stage for occupied housing units applied 16 household type categories, while the second stage used the two sampling categories described above for persons. The third stage applied three units-in-structure categories; i.e. single units, multi-unit less than 10 and multi-unit 10 or more. The fourth stage could potentially use 200 tenure-race-Hispanic origin-value/rent groups. The stages for ratio estimation for housing units were as follows:

OCCUPIED HOUSING UNITS

STAGE I: TYPE OF HOUSEHOLD

Group	Housing Units With a Family With Own Children Under 18
1	2 persons in housing unit
2	3 persons in housing unit
3	4 persons in housing unit
4	5 to 7 persons in housing unit
5	8 or more persons in housing unit
	Housing Units With a Family Without Own Children Under 18
6-10	2 through 8 or more persons in housing unit
	All Other Housing Units
11	1 person in housing unit
12-16	2 through 8 or more persons in housing unit

STAGE II: SAMPLING RATE CATEGORY

1	Sampling rate of 1-in-2
2	Sampling rate less than 1-in-2

STAGE III: UNITS IN STRUCTURE

1	Single unit structure
2	Multi-unit structure consisting of fewer than 10 individual units
3	Multi-unit structure consisting of 10 or more individual units

STAGE IV: TENURE/RACE AND HISPANIC ORIGIN OF HOUSEHOLDER/VALUE OR RENT

Group	Owner
	White Householder
	Householder of Hispanic Origin
	Value
1	Less than \$20,000
2	\$20,000 to \$39,999
3	\$40,000 to \$59,999
4	\$60,000 to \$79,999

STAGE IV: TENURE/RACE AND HISPANIC ORIGIN OF HOUSEHOLDER/VALUE OR RENT— Con.

5	\$80,000 to \$99,999
6	\$100,000 to \$149,999
7	\$150,000 to \$249,999
8	\$250,000 to \$299,999
9	\$300,000 or more
10	Other ¹
	Householder Not of Hispanic Origin
11-20	Same value categories as groups 1 through 10
	Black Householder
21-40	Same Hispanic origin/value categories as groups 1 through 20
	Asian or Pacific Islander Householder
41-60	Same Hispanic origin/value categories as groups 1 through 20
	American Indian, Eskimo, or Aleut Householder
61-80	Same Hispanic origin/value categories as groups 1 through 20
	Householder of Other Race
81-100	Same Hispanic origin/value categories as groups 1 through 20
	Renter
	White Householder
	Householder of Hispanic origin
	Rent
101	Less than \$100
102	\$100 to \$199
103	\$200 to \$299
104	\$300 to \$399
105	\$400 to \$499
106	\$500 to \$599
107	\$600 to \$749
108	\$750 to \$999
109	\$1,000 or more
110	No cash rent
	Householder Not of Hispanic Origin
111-120	Same rent categories as groups 101 through 110
	Black Householder
121-140	Same Hispanic origin/rent categories as groups 101 through 120

¹Value of units in this category results from other factors besides housing value alone, for example, inclusion of more than 10 acres of land, or presence of a business establishment on the premises.

STAGE IV: TENURE/RACE AND HISPANIC ORIGIN OF HOUSEHOLDER/VALUE OR RENT— Con.

	Asian or Pacific Islander Householder
141-160	Same Hispanic origin/rent categories as groups 101 through 120
	American Indian, Eskimo, or Aleut Householder
161-180	Same Hispanic origin/rent categories as groups 101 through 120
	Householder of Other Race
181-200	Same Hispanic origin/rent categories as groups 101 through 120
	Vacant Housing Units
1	Vacant for rent
2	Vacant for sale
3	Other vacant

The estimates produced by this procedure realize some of the gains in sampling efficiency that would have resulted if the population had been stratified into the ratio estimation groups before sampling, and if the sampling rate had been applied independently to each group. The net effect is a reduction in both the standard error and the possible bias of most estimated characteristics to levels below what would have resulted from simply using the initial, unadjusted weight. A by-product of this estimation procedure is that the estimates from the sample will, for the most part, be consistent with the complete count figures for the population and housing unit groups used in the estimation procedure.

Control of Nonsampling Error

As mentioned earlier, both sample and 100-percent data are subject to nonsampling error. This component of error could introduce serious bias into the data, and the total error could increase dramatically over that which would result purely from sampling. While it is impossible to completely eliminate nonsampling error from an operation as large and complex as the decennial census, the Bureau of the Census attempted to control the sources of such error during the collection and processing operations. Described below are the primary sources of nonsampling error and the programs instituted for control of this error. The success of these programs, however, was contingent upon how well the instructions actually were carried out during the census. As part of the 1990 census evaluation program, both the effects of these programs and the amount of error remaining after their application will be evaluated.

Undercoverage—It is possible for some households or persons to be missed entirely by the census. The undercoverage of persons and housing units can introduce biases into the data.

Several coverage improvement programs were implemented during the development of the census address list and census enumeration and processing to minimize undercoverage of the population and housing units. These programs were developed based on experience from the 1980 census and results from the 1990 census testing cycle. In developing and updating the census address list, the Census Bureau used a variety of specialized procedures in different parts of the country.

- In the large urban areas, the Census Bureau purchased and geocoded address lists. Concurrent with geocoding, the United States Postal Service (USPS) reviewed and updated this list. After the postal check, census enumerators conducted a dependent canvass and update operation. In the fall of 1989, local officials were given the opportunity to examine block counts of address listings (local review) and identify possible errors. Prior to mailout, the USPS conducted a final review.
- In small cities, suburban areas, and selected rural parts of the country, the Census Bureau created the address list through a listing operation. The USPS reviewed and updated this list, and the Census Bureau reconciled USPS corrections and updated through a field operation. In the fall of 1989, local officials participated in reviewing block counts of address listings. Prior to mailout, the USPS conducted a final review.
- The Census Bureau (rather than the USPS) conducted a listing operation in the fall of 1989 and delivered census questionnaires in selected rural and seasonal housing areas in March of 1990. In some inner-city public housing developments, whose addresses had been obtained via the purchased address list noted above, census questionnaires were also delivered by Census Bureau enumerators.

Coverage improvement programs continued during and after mailout. A recheck of units initially classified as vacant or nonexistent improved further the coverage of persons and housing units. All local officials were given the opportunity to participate in a post-census local review, and census enumerators conducted an additional recanvass. In addition, efforts were made to improve the coverage of unique population groups, such as the homeless and parolees/probationers. Computer and clerical edits and telephone and personal visit followup also contributed to improved coverage.

More extensive discussion of the programs implemented to improve coverage will be published by the Census Bureau when the evaluation of the coverage improvement program is completed.

Respondent and Enumerator Error—The person answering the questionnaire or responding to the questions posed by an enumerator could serve as a source of error, although the questions were phrased as clearly as possible based on precensus tests, and detailed instructions for completing the questionnaire were provided to each household. In addition, respondents' answers were edited for completeness and consistency, and problems were followed up as necessary.

The enumerator may misinterpret or otherwise incorrectly record information given by a respondent; may fail to collect some of the information for a person or household; or may collect data for households that were not designated as part of the sample. To control these problems, the work of enumerators was monitored carefully. Field staff were prepared for their tasks by using standardized training packages that included hands-on experience in using census materials. A sample of the households interviewed by enumerators for nonresponse were reinterviewed to control for the possibility of data for fabricated persons being submitted by enumerators. Also, the estimation procedure was designed to control for biases that would result from the collection of data from households not designated for the sample.

Processing Error—The many phases involved in processing the census data represent potential sources for the introduction of nonsampling error. The processing of the census questionnaires includes the field editing, followup, and transmittal of completed questionnaires; the manual coding of write-in responses; and the electronic data processing. The various field, coding and computer operations undergo a number of quality control checks to insure their accurate application.

Nonresponse—Nonresponse to particular questions on the census questionnaire allows for the introduction of bias into the data, since the characteristics of the nonrespondents have not been observed and may differ from those reported by respondents. As a result, any imputation procedure using respondent data may not completely reflect this difference either at the elemental level (individual person or housing unit) or on the average. Some protection against the introduction of large biases is afforded by minimizing nonresponse. In the census, nonresponse was reduced substantially during the field operations by the various edit and followup operations aimed at obtaining a response for every question. Characteristics for the nonresponses remaining after this operation were imputed by the computer by using reported data for a person or housing unit with similar characteristics.

EDITING OF UNACCEPTABLE DATA

The objective of the processing operation is to produce a set of data that describes the population as accurately and clearly as possible. To meet this objective, questionnaires were edited during field data collection operations for consistency, completeness, and acceptability. Questionnaires also were reviewed by census clerks for omissions, certain specific inconsistencies, and population coverage. For example, write-in entries such as "Don't know" or "NA" were considered unacceptable. For some district offices, the initial edit was automated; however, for the majority of the district offices, it was performed by clerks. As a result of this operation, a telephone or personal visit followup was made to obtain missing information. Potential coverage errors were included in the followup, as well as a sample of questionnaires with omissions and/or inconsistencies.

Subsequent to field operations, remaining incomplete or inconsistent information on the questionnaires was assigned using imputation procedures during the final automated edit of the collected data. Imputations, or computer assignments of acceptable codes in place of unacceptable entries or blanks, are needed most often when an entry for a given item is lacking or when the information reported for a person or housing unit on that item is inconsistent with other information for that same person or housing unit. As in previous censuses, the general procedure for changing unacceptable entries was to assign an entry for a person or housing unit that was consistent with entries for persons or housing units with similar characteristics. The assignment of acceptable codes in place of blanks or unacceptable entries enhances the usefulness of the data.

Another way in which corrections were made during the computer editing process was through substitution; that is, the assignment of a full set of characteristics for a person or housing unit. When there was an indication that a housing unit was occupied but the questionnaire contained no information for the people within the household or the occupants were not listed on the questionnaire, a previously accepted household was selected as a substitute, and the full set of characteristics for the substitute was duplicated. The assignment of the full set of housing characteristics occurred when there was no housing information available. If the housing unit was determined to be occupied, the housing characteristics were assigned from a previously processed occupied unit. If the housing unit was vacant, the housing characteristics were assigned from a previously processed vacant unit.

Table A. Unadjusted Standard Error for Estimated Totals

[Based on a 1-in-6 simple random sample]

Estimated Total ¹	Size of publication area ²													
	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	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

¹For estimated totals larger than 10,000,000, the standard error is somewhat larger than the table values. The formula given below should be used to calculate the standard error.

$$SE(\hat{Y}) = \sqrt{5\hat{Y}\left(1 - \frac{\hat{Y}}{N}\right)}$$

N = Size of area

\hat{Y} = Estimate of characteristic total

²The total count of persons in the area if the estimated total is a person characteristic, or the total count of housing units in the area if the estimated total is a housing unit characteristic.

Table B. Unadjusted Standard Error in Percentage Points for Estimated Percentage

[Based on a 1-in-6 simple random sample]

Estimated Percentage	Base of percentage ¹												
	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	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

¹For a percentage and/or base of percentage not shown in the table, the formula given below may be used to calculate the standard error. This table should only be used for proportions, that is, where the numerator is a subset of the denominator.

$$SE(\hat{p}) = \sqrt{\frac{5}{B} \hat{p}(100 - \hat{p})}$$

B = Base of estimated percentage

\hat{p} = Estimated percentage

Table C. Standard Error Design Factors for Place of Work

[Percent of persons in sample¹]

State	Less than 15 percent ¹	15 to 30 percent ¹	30 to 45 percent ¹	45 percent or more ¹
Alabama	1.5	1.2	0.7	0.6
Alaska	1.5	1.2	0.8	0.5
Arizona	1.6	1.2	0.8	0.5
Arkansas	1.5	1.3	0.7	0.6
California	1.6	1.3	0.8	0.6
Colorado	1.4	1.2	0.6	0.6
Connecticut	1.5	1.3	0.6	0.6
Delaware	1.5	1.3	0.8	0.6
District of Columbia	1.7	1.4	0.8	0.7
Florida	1.6	1.3	0.7	0.6
Georgia	1.5	1.3	0.7	0.6
Hawaii	1.6	1.4	0.8	0.7
Idaho	1.4	1.2	0.8	0.6
Illinois	1.5	1.3	0.6	0.6
Indiana	1.4	1.2	0.6	0.6
Iowa	1.5	1.2	0.6	0.6
Kansas	1.4	1.3	0.7	0.6
Kentucky	1.4	1.2	0.7	0.6
Louisiana	1.4	1.2	0.6	0.5
Maine	1.4	1.2	0.7	0.6
Maryland	1.5	1.3	0.8	0.6
Massachusetts	1.4	1.2	0.7	0.6
Michigan	1.4	1.2	0.7	0.6
Minnesota	1.4	1.2	0.7	0.6
Mississippi	1.5	1.3	0.7	0.6
Missouri	1.5	1.3	0.7	0.6
Montana	1.5	1.2	0.8	0.6
Nebraska	1.5	1.2	0.8	0.6
Nevada	1.6	1.2	0.7	0.6
New Hampshire	1.5	1.3	0.7	0.6
New Jersey	1.5	1.3	0.7	0.6
New Mexico	1.5	1.3	0.7	0.6
New York	1.5	1.2	0.7	0.6
North Carolina	1.5	1.3	0.7	0.6
North Dakota	1.5	1.2	0.0	0.6
Ohio	1.4	1.2	0.6	0.6
Oklahoma	1.5	1.3	0.7	0.6
Oregon	1.5	1.2	0.7	0.6
Pennsylvania	1.5	1.2	0.7	0.6
Rhode Island	1.5	1.2	0.6	0.5
South Carolina	1.5	1.3	0.7	0.6
South Dakota	1.5	1.2	0.8	0.6
Tennessee	1.5	1.3	0.7	0.6
Texas	1.5	1.3	0.7	0.6
Utah	1.4	1.2	0.8	0.6
Vermont	1.4	1.2	0.8	0.6
Virginia	1.5	1.3	0.7	0.6
Washington	1.4	1.2	0.7	0.6
West Virginia	1.4	1.2	0.7	0.6
Wisconsin	1.5	1.2	0.7	0.6
Wyoming	1.5	1.3	0.8	0.5

¹Percent-in-sample information is not provided in the documentation or data files for the *Number of Workers By County of Residence By County of Work* data product. Conservative estimates of the standard errors may be calculated by using the design factors contained in the "Less than 15 percent" column in table C, above. Information on percent of persons in sample may be obtained from the *Population and Housing Characteristics for Census Tracts and Block Numbering Areas* (1990 CPH-3) report series and from *Summary Tape File (STF) 4*.

APPENDIX D.

Collection and Processing Procedures

CONTENTS

Data Collection Procedures	D-2
Enumeration and Residence Rules	D-1
Processing Procedures	D-5

ENUMERATION AND RESIDENCE RULES

In accordance with census practice dating back to the first United States census in 1790, each person was to be enumerated as an inhabitant of his or her "usual residence" in the 1990 census. Usual residence is the place where the person lives and sleeps most of the time or considers to be his or her usual residence. This place is not necessarily the same as the person's legal residence or voting residence. In the vast majority of cases, however, the use of these different bases of classification would produce substantially the same statistics, although there might be appreciable differences for a few areas.

The implementation of this practice has resulted in the establishment of rules for certain categories of persons whose usual place of residence is not immediately apparent. Furthermore, this practice means that persons were not always counted as residents of the place where they happened to be staying on Census Day (April 1, 1990).

Enumeration Rules

Each person whose usual residence was in the United States was to be included in the census, without regard to the person's legal status or citizenship. In a departure from earlier censuses, foreign diplomatic personnel participated voluntarily in the census, regardless of their residence on or off the premises of an embassy. As in previous censuses, persons in the United States specifically excluded from the census were foreign travelers who had not established a residence.

Americans with a usual residence outside the United States were not enumerated in the 1990 census. United States military and Federal civilian employees, and their dependents overseas, are included in the population counts for States for purposes of Congressional apportionment, but are excluded from all other tabulations for States and their subdivisions. The counts of United States military and Federal civilian employees, and their dependents, were obtained from administrative records maintained by Federal departments and agencies. Other

Americans living overseas, such as employees of international agencies and private businesses and students, were not enumerated, nor were their counts obtained from administrative sources. On the other hand, Americans temporarily overseas were to be enumerated at their usual residence in the United States.

Residence Rules

Each person included in the census was to be counted at his or her usual residence—the place where he or she lives and sleeps most of the time or the place where the person considers to be his or her usual home. If a person had no usual residence, the person was to be counted where he or she was staying on April 1, 1990.

Persons temporarily away from their usual residence, whether in the United States or overseas, on a vacation or on a business trip, were counted at their usual residence. Persons who occupied more than one residence during the year were counted at the one they considered to be their usual residence. Persons who moved on or near Census Day were counted at the place they considered to be their usual residence.

Persons in the Armed Forces—Members of the Armed Forces were counted as residents of the area in which the installation was located, either on the installation or in the surrounding community. Family members of Armed Forces personnel were counted where they were living on Census Day (for example, with the Armed Forces person or at another location).

Each Navy ship not deployed to the 6th or 7th Fleet was attributed to the municipality that the Department of the Navy designated as its homeport. If the homeport included more than one municipality, ships berthed there on Census Day were assigned by the Bureau of the Census to the municipality in which the land immediately adjacent to the dock or pier was actually located. Ships attributed to the homeport, but not physically present and not deployed to the 6th or 7th Fleet, were assigned to the municipality named on the Department of the Navy's homeport list. These rules also apply to Coast Guard vessels.

Personnel assigned to each Navy and Coast Guard ship were given the opportunity to report a residence off the ship. Those who did report an off-ship residence in the communities surrounding the homeport were counted there; those who did not were counted as residents of

the ship. Personnel on Navy ships deployed to the 6th or 7th Fleet on Census Day were considered to be part of the overseas population.

Persons on Maritime Ships—Persons aboard maritime ships who reported an off-ship residence were counted at that 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 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 Away at School—College students were counted as residents of the area in which they were living while attending college, as they have been since the 1950 census. Children in boarding schools below the college level were counted at their parental home.

Persons in Institutions—Persons under formally authorized, supervised care or custody, such as in Federal or State prisons; local jails; Federal detention centers; juvenile institutions; nursing, convalescent, and rest homes for the aged and dependent; or homes, schools, hospitals, or wards for the physically handicapped, mentally retarded, or mentally ill, were counted at these places.

Persons Away From Their Usual Residence on Census Day—Migrant agricultural workers who did not report a usual residence elsewhere were counted as residents of the place where they were on Census Day. Persons in worker camps who did not report a usual residence elsewhere were counted as residents of the camp where they were on Census Day.

In some parts of the country, natural disasters displaced significant numbers of households from their usual place of residence. If these persons reported a destroyed or damaged residence as their usual residence, they were counted at that location.

Persons away from their usual residence were counted by means of interviews with other members of their families, resident managers, or neighbors.

DATA COLLECTION PROCEDURES

The 1990 census was conducted primarily through self-enumeration. The questionnaire packet included general information about the 1990 census and an

instruction guide explaining how to complete the questionnaire. Spanish-language questionnaires and instruction guides were available on request. Instruction guides also were available in 32 other languages.

Enumeration of Housing Units

Each housing unit in the country received one of two versions of the census questionnaire:

1. A short-form questionnaire that contained a limited number of basic population and housing questions; these questions were asked of all persons and housing units and are often referred to as 100-percent questions.
2. A long-form questionnaire that contained the 100-percent items and a number of additional questions; a sampling procedure was used to determine those housing units that were to receive the long-form questionnaire.

Three sampling rates were employed. For slightly more than one-half of the country, one in every six housing units (about 17 percent) received the long-form or sample questionnaire. In functioning local governmental units (counties and incorporated places, and in some parts of the country, towns and townships) estimated to have fewer than 2,500 inhabitants, every other housing unit (50 percent) received the sample questionnaire in order to enhance the reliability of the sample data for these small areas. For census tracts and block numbering areas having more than 2,000 housing units in the Census Bureau's address files, one in every eight housing units (about 13 percent) received a sample questionnaire, providing reliable statistics for these areas while permitting the Census Bureau to stay within a limit of 17.7 million sample questionnaires, or a one-in-six sample, nationwide.

The mail-out/mail-back procedure was used mainly in cities, suburban areas, towns, and rural areas where mailing addresses consisted of a house number and street name. In these areas, the Census Bureau developed mailing lists that included about 88.4 million addresses. The questionnaires were delivered through the mail and respondents were to return them by mail. Census questionnaires were delivered 1 week before Census Day (April 1, 1990).

The update/leave/mail-back method was used mainly in densely populated rural areas where it was difficult to develop mailing lists because mailing addresses did not use house number and street name. The Census Bureau compiled lists of housing units in advance of the census. Enumerators delivered the questionnaires, asked respondents to return them by mail, and added housing units not on the mailing lists. This method was used mainly in the South and Midwest, and also included some high-rise, low-income urban areas. A variation of this method

was used in urban areas having large numbers of boarded-up buildings. About 11 million housing units were enumerated using this method.

The list/enumerate method (formerly called conventional or door-to-door enumeration) was used mainly in very remote and sparsely-settled areas. The United States Postal Service delivered unaddressed short-form questionnaires before Census Day. Starting a week before Census Day, enumerators canvassed these areas, checked that all housing units received a questionnaire, created a list of all housing units, completed long-form questionnaires, and picked up the completed short-form questionnaires. This method was used mainly in the West and Northeast to enumerate an estimated 6.5 million housing units.

Followup

Nonresponse Followup—In areas where respondents were to mail back their questionnaires, an enumerator visited each address from which a questionnaire was not received.

Coverage and Edit-Failure Followup—In the mail-back areas, some households returned a questionnaire that did not meet specific quality standards because of incomplete or inconsistent information, or the respondent had indicated difficulty in deciding who was to be listed on the questionnaire. These households were contacted by telephone or by personal visit to obtain the missing information or to clarify who was to be enumerated in the household. In areas where an enumerator picked up the questionnaires, the enumerator checked the respondent-filled questionnaire for completeness and consistency.

Special Enumeration Procedures

Special procedures and questionnaires were used for the enumeration of persons in group quarters, such as college dormitories, nursing homes, prisons, military barracks, and ships. The questionnaires (Individual Census Reports, Military Census Reports, and Shipboard Census Reports) included the 100-percent population questions but did not include any housing questions. In all group quarters, all persons were asked the basic population questions; in most group quarters, additional questions were asked of a sample (one-in-six) of persons.

Shelter and Street Night (S-Night)

The Census Bureau collected data for various components of the homeless population at different stages in the 1990 census. "Shelter and Street Night" (S-Night) was a special census operation to count the population in four types of locations where homeless people are

found. On the evening of March 20, 1990, and during the early morning hours of March 21, 1990, enumerators counted persons in pre-identified locations:

1. Emergency shelters for the homeless population (public and private; permanent and temporary).
2. Shelters with temporary lodging for runaway youths.
3. Shelters for abused women and their children.
4. Open locations in streets or other places not intended for habitation.

Emergency shelters include all hotels and motels costing \$12 or less (excluding taxes) per night regardless of whether persons living there considered themselves to be homeless, hotels and motels (regardless of cost) used entirely to shelter homeless persons, and pre-identified rooms in hotels and motels used for homeless persons and families. Enumeration in shelters usually occurred from 6 p.m. to midnight; street enumeration, from 2 a.m. to 4 a.m.; abandoned and boarded-up buildings from 4 a.m. to 8 a.m.; and shelters for abused women, from 6 p.m. on March 20 to noon on March 21.

Other components, which some consider as part of the homeless population, were enumerated as part of regular census operations. These include persons doubled up with other families, as well as persons with no other usual home living in transient sites, such as commercial campgrounds, maternity homes for unwed mothers, and drug/alcohol abuse detoxification centers. In institutions, such as local jails and mental hospitals, the Census Bureau does not know who has a usual home elsewhere; therefore, even though some are literally homeless, these persons cannot be identified separately as a component of the homeless population.

There is no generally agreed-upon definition of "the homeless," and there are limitations in the census count that prevent obtaining a total count of the homeless population under any definition. As such, the Census Bureau does not have a definition and will not provide a total count of "the homeless." Rather, the Census Bureau will provide counts and characteristics of persons found at the time of the census in *selected* types of living arrangements. These selected components can be used as building blocks to construct a count of homeless persons appropriate to particular purposes as long as the data limitations are taken into account.

In preparation for "Shelter-and-Street-Night" enumeration, the regional census centers (RCC's) mailed a certified letter (Form D-33 (L)) to the highest elected official of each active functioning government of the United States (more than 39,000) requesting them to identify:

1. All shelters with sleeping facilities (permanent and temporary, such as church basements, armories, public buildings, and so forth, that could be open on March 20).

2. Hotels and motels used to house homeless persons and families.
3. A list of outdoor locations where homeless persons tend to be at night.
4. Places such as bus or train stations, subway stations, airports, hospital emergency rooms, and so forth, where homeless persons seek shelter at night.
5. The specific addresses of abandoned or boarded-up buildings where homeless persons were thought to stay at night.

The letter from the RCC's to the governmental units emphasized the importance of listing night-time congregating sites. The list of shelters was expanded using information from administrative records and informed local sources. The street sites were limited to the list provided by the jurisdictions. All governmental units were eligible for "Shelter and Street Night." For cities with 50,000 or more persons, the Census Bureau took additional steps to update the list of shelter and street locations if the local jurisdiction did not respond to the certified letter. Smaller cities and rural areas participated if the local jurisdiction provided the Census Bureau a list of shelters or open public places to visit or if shelters were identified through our inventory development, local knowledge update, or during the Special Place Prelist operation.

The Census Bureau encouraged persons familiar with homeless persons and the homeless themselves to apply as enumerators. This recruiting effort was particularly successful in larger cities.

For shelters, both long- and short-form Individual Census Reports (ICR's) were distributed. For street enumeration, only short-form ICR's were used. Persons in shelters and at street locations were asked the basic population questions. Additional questions about social and economic characteristics were asked of a sample of persons in shelters only.

Enumerators were instructed *not* to ask who was homeless; rather, they were told to count all persons (including children) staying overnight at the shelters, and everyone they saw on the street except the police, other persons in uniform, and persons engaged in employment or obvious money-making activities other than begging and panhandling.

At both shelter and street sites, persons found sleeping were not awakened to answer questions. Rather, the enumerator answered the sex and race questions by observation and estimated the person's age to the best of his or her ability. In shelters, administrative records and information from the shelter operator were used, when available, for persons who were already asleep.

Less than 1 percent of shelters refused to participate in the census count at first. By the end of the census period, most of those eventually cooperated and the

number of refusals had been reduced to a few. For the final refusals, head counts and population characteristics were obtained by enumerators standing outside such shelters and counting people as they left in the morning.

The "street" count was restricted to persons who were visible when the enumerator came to the open, public locations that had been identified by local jurisdictions. Homeless persons who were well hidden, moving about, or in locations other than those identified by the local governments were likely missed. The number missed will never be known and there is no basis to make an estimate of the number missed from census data. The count of persons in open, public places was affected by many factors, including the extra efforts made to encourage people to go to shelters for "Shelter and Street Night," the weather (which was unusually cold in many parts of the country), the presence of the media, and distrust of the census. Expectations of the number of homeless persons on the street cannot be based on the number seen during the day because the night-time situation is normally very different as more homeless persons are in shelters or very well hidden.

For both "Shelter-and-Street-Night" locations, the Census Bureau assumed that the usual home of those enumerated was in the block where they were found (shelter or street).

The "Shelter-and-Street-Night" operation replaced and expanded the 1980 Mission Night (M-Night) and Casual Count operations. These two operations were aimed at counting the population who reported having no usual residence. M-Night was conducted a week after Census Day, in April 1980. Enumerators visited hotels, motels, and similar places costing \$4 or less each night; missions, flophouses, local jails and similar places at which the average length of stay was 30 days or less; and nonshelter locations, such as bus depots, train stations, and all night movie theaters. Questions were asked of everyone, regardless of age. Enumerators conducted M-Night up to midnight on April 8, 1980, and returned the next morning to collect any forms completed after midnight.

The Casual Count operation was conducted in May 1980 at additional nonshelter locations, such as street corners, pool halls, welfare and employment offices. This operation lasted for approximately 2 weeks. Casual Count was conducted during the day only in selected large central cities. Only persons who appeared to be at least 15 years of age were asked if they had been previously enumerated. Casual Count was actually a coverage-improvement operation. It was not specifically an operation to count homeless persons living in the streets. Persons were excluded if they said they had a usual home outside the city because it was not cost effective to check through individual questionnaires in another city to try to find the person.

PROCESSING PROCEDURES

Respondents returned many census questionnaires by mail to 1 of over 344 census district offices or to one of six processing offices. In these offices, the questionnaires were "checked in" and edited for completeness and consistency of the responses. After this initial processing had been performed, all questionnaires were sent to the processing offices.

In the processing offices, the household questionnaires were microfilmed and processed by the Film Optical Sensing Device for Input to Computers (FOSDIC). For most items on the questionnaire, the information supplied by the respondent was indicated by filling circles in predesignated positions. FOSDIC electronically "read" these filled circles from the microfilm copy of the questionnaire and transferred the information to computer tape. The computer tape did not include individual names, addresses, or handwritten responses.

The data processing was performed in several stages. All questionnaires were microfilmed, "read" by FOSDIC,

and transferred to computer disk. Selected written entries in the race question on both the short and long forms were keyed from the microfilm and coded using the data base developed from the 1980 census and subsequent content and operational tests. Keying of other written entries on the long forms occurred in the seven processing offices.

The information (for example, income dollar amounts or homeowner shelter costs) on these keyed files was merged with the FOSDIC data or processed further through one of three automated coding programs. The codes for industry, occupation, place-of-birth, migration, place-of-work, ancestry, language, relationship, race, and Hispanic origin were merged with the FOSDIC data for editing, weighting, and tabulating operations at Census Bureau headquarters. All responses to the questions on Individual Census Reports (ICR's), Military Census Reports (MCR's), and Shipboard Census Reports (SCR's) were keyed, not processed by microfilm or FOSDIC.

APPENDIX E.

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
How to fill out your census form	2
Example	2
Your answers are confidential	2
Instructions for the census questions	3-11
What the census is about	12
Why the census asks certain questions	12

CENSUS '90



U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

D4

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
<input checked="" type="radio"/> 41	<input checked="" type="radio"/> 1949	<input checked="" type="radio"/> 09	<input checked="" type="radio"/> 1981
<input type="radio"/> 00 <input type="radio"/> 00 <input type="radio"/> 00	<input type="radio"/> 18 <input type="radio"/> 00 <input type="radio"/> 00	<input type="radio"/> 00 <input type="radio"/> 00 <input type="radio"/> 00	<input type="radio"/> 18 <input type="radio"/> 00 <input type="radio"/> 00
<input type="radio"/> 10 <input type="radio"/> 10 <input checked="" type="radio"/> 10	<input type="radio"/> 90 <input type="radio"/> 10 <input type="radio"/> 10	<input type="radio"/> 10 <input type="radio"/> 10 <input type="radio"/> 10	<input type="radio"/> 90 <input type="radio"/> 10 <input type="radio"/> 10
<input type="radio"/> 20 <input type="radio"/> 20	<input type="radio"/> 20 <input type="radio"/> 20	<input type="radio"/> 20 <input type="radio"/> 20	<input type="radio"/> 20 <input type="radio"/> 20
<input type="radio"/> 30 <input type="radio"/> 30	<input type="radio"/> 30 <input type="radio"/> 30	<input type="radio"/> 30 <input type="radio"/> 30	<input type="radio"/> 30 <input type="radio"/> 30
<input type="radio"/> 40 <input type="radio"/> 40	<input type="radio"/> 40 <input type="radio"/> 40	<input type="radio"/> 40 <input type="radio"/> 40	<input type="radio"/> 40 <input type="radio"/> 40
<input type="radio"/> 50 <input type="radio"/> 50	<input type="radio"/> 50 <input type="radio"/> 50	<input type="radio"/> 50 <input type="radio"/> 50	<input type="radio"/> 50 <input type="radio"/> 50
<input type="radio"/> 60 <input type="radio"/> 60	<input type="radio"/> 60 <input type="radio"/> 60	<input type="radio"/> 60 <input type="radio"/> 60	<input type="radio"/> 60 <input type="radio"/> 60
<input type="radio"/> 70 <input type="radio"/> 70	<input type="radio"/> 70 <input type="radio"/> 70	<input type="radio"/> 70 <input type="radio"/> 70	<input type="radio"/> 70 <input type="radio"/> 70
<input type="radio"/> 80 <input type="radio"/> 80	<input type="radio"/> 80 <input type="radio"/> 80	<input type="radio"/> 80 <input type="radio"/> 80	<input type="radio"/> 80 <input type="radio"/> 80
<input type="radio"/> 90 <input type="radio"/> 90	<input type="radio"/> 90 <input type="radio"/> 90	<input type="radio"/> 90 <input type="radio"/> 90	<input type="radio"/> 90 <input type="radio"/> 90

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:
Enter a description like the following -
Metal furniture manufacturing
Retail grocery store
Petroleum refining
Cattle ranch
Do not enter -
Furniture company
Grocery store
Oil company
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:
Enter a description like the following -
Production clerk
Carpenter's helper
Auto engine mechanic
Registered nurse
Do not enter -
Clerk
Helper
Mechanic
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.

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
1			7		
2			8		
3			9		
4			10		
5			11		
6			12		

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	First name	Last name	First name
2. How is this person related to PERSON 1? Fill ONE circle for each person. If Other relative 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.	START in this column with the household member (or one of the members) in whose name the home is owned, being bought, or rented. If there is no such person, start in this column with any adult household member.		If a RELATIVE of Person 1: <input type="radio"/> Husband/wife <input type="radio"/> Brother/sister <input type="radio"/> Natural-born or adopted son/daughter <input type="radio"/> Father/mother <input type="radio"/> Stepson/stepdaughter <input type="radio"/> Grandchild <input type="radio"/> Other relative → If NOT RELATED to Person 1: <input type="radio"/> Roomer, boarder, or foster child <input type="radio"/> Unmarried partner <input type="radio"/> Housemate, roommate <input type="radio"/> Other nonrelative	
3. Sex Fill ONE circle for each person.	<input type="radio"/> Male <input type="radio"/> Female		<input type="radio"/> Male <input type="radio"/> Female	
4. Race Fill ONE circle for the race that the person considers himself/herself to be. If Indian (Amer.), print the name of the enrolled or principal tribe. → If Other Asian or Pacific Islander (API), print one group, for example: Hmong, Fijian, Laotian, Thai, Tongan, Pakistani, Cambodian, and so on. → If 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) →		<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) →	
5. Age and year of birth a. Print each person's age at last birthday. Fill in the matching circle below each box. b. Print each person's year of birth and fill the matching circle below each box.	a. Age 0 0 0 0 0 1 0 1 0 1 2 0 2 0 3 0 3 0 4 0 4 0 5 0 5 0 6 0 6 0 7 0 7 0 8 0 8 0 9 0 9 0 b. Year of birth 1 8 0 0 0 0 9 0 1 0 1 0 2 0 2 0 3 0 3 0 4 0 4 0 5 0 5 0 6 0 6 0 7 0 7 0 8 0 8 0 9 0 9 0		a. Age 0 0 0 0 0 1 0 1 0 1 2 0 2 0 3 0 3 0 4 0 4 0 5 0 5 0 6 0 6 0 7 0 7 0 8 0 8 0 9 0 9 0 b. Year of birth 1 8 0 0 0 0 9 0 1 0 1 0 2 0 2 0 3 0 3 0 4 0 4 0 5 0 5 0 6 0 6 0 7 0 7 0 8 0 8 0 9 0 9 0	
6. Marital status Fill ONE circle for each person.	<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	
7. Is this person of Spanish/Hispanic origin? Fill ONE circle for each person. If Yes, other Spanish/Hispanic, print one group. →	<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.) →	
FOR CENSUS USE →	<input type="radio"/> <input type="radio"/>		<input type="radio"/> <input type="radio"/>	

PERSON 7		NOW PLEASE ANSWER QUESTIONS H1a—H26 FOR THIS HOUSEHOLD	
Last name _____ First name _____ Middle initial _____		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? <input type="radio"/> Yes, please print the name(s) _____ and reason(s). _____ <input type="radio"/> No	
If a RELATIVE of Person 1: <input type="radio"/> Husband/wife <input type="radio"/> Brother/sister <input type="radio"/> Natural-born or adopted son/daughter <input type="radio"/> Father/mother <input type="radio"/> Grandchild <input type="radio"/> Other relative _____ <input type="radio"/> Stepson/stepdaughter _____		H15a. Is this house on ten or more acres? <input type="radio"/> Yes <input type="radio"/> No	
If NOT RELATED to Person 1: <input type="radio"/> Roomer, boarder, or foster child <input type="radio"/> Unmarried partner <input type="radio"/> Housemate, roommate <input type="radio"/> Other nonrelative _____		b. Is there a business (such as a store or barber shop) or a medical office on this property? <input type="radio"/> Yes <input type="radio"/> No	
<input type="radio"/> Male <input type="radio"/> Female		Answer only if you or someone in this household OWNS OR IS BUYING this house or apartment — H16. 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? <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <input type="radio"/> Less than \$10,000 <input type="radio"/> \$10,000 to \$14,999 <input type="radio"/> \$15,000 to \$19,999 <input type="radio"/> \$20,000 to \$24,999 <input type="radio"/> \$25,000 to \$29,999 <input type="radio"/> \$30,000 to \$34,999 <input type="radio"/> \$35,000 to \$39,999 <input type="radio"/> \$40,000 to \$44,999 <input type="radio"/> \$45,000 to \$49,999 <input type="radio"/> \$50,000 to \$54,999 <input type="radio"/> \$55,000 to \$59,999 <input type="radio"/> \$60,000 to \$64,999 <input type="radio"/> \$65,000 to \$69,999 </div> <div style="width: 48%;"> <input type="radio"/> \$70,000 to \$74,999 <input type="radio"/> \$75,000 to \$79,999 <input type="radio"/> \$80,000 to \$89,999 <input type="radio"/> \$90,000 to \$99,999 <input type="radio"/> \$100,000 to \$124,999 <input type="radio"/> \$125,000 to \$149,999 <input type="radio"/> \$150,000 to \$174,999 <input type="radio"/> \$175,000 to \$199,999 <input type="radio"/> \$200,000 to \$249,999 <input type="radio"/> \$250,000 to \$299,999 <input type="radio"/> \$300,000 to \$399,999 <input type="radio"/> \$400,000 to \$499,999 <input type="radio"/> \$500,000 or more </div> </div>	
<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) <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <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 _____ </div> <div style="width: 48%;"> <input type="radio"/> Other race (Print race) _____ </div> </div>		H2. Which best describes this building? Include all apartments, flats, etc., even if vacant. <input type="radio"/> A mobile home or trailer <input type="radio"/> A one-family house detached from any other house <input type="radio"/> A one-family house attached to one or more houses <input type="radio"/> A building with 2 apartments <input type="radio"/> A building with 3 or 4 apartments <input type="radio"/> A building with 5 to 9 apartments <input type="radio"/> A building with 10 to 19 apartments <input type="radio"/> A building with 20 to 49 apartments <input type="radio"/> A building with 50 or more apartments <input type="radio"/> Other _____	
a. Age _____ b. Year of birth _____ <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> 0 0 0 0 0 1 0 1 0 0 2 0 2 0 3 0 3 0 4 0 4 0 5 0 5 0 6 0 6 0 7 0 7 0 8 0 8 0 9 0 9 0 </div> <div style="width: 48%;"> 1 8 0 0 0 9 0 1 0 1 2 0 2 0 3 0 3 0 4 0 4 0 5 0 5 0 6 0 6 0 7 0 7 0 8 0 8 0 9 0 9 0 </div> </div>		H3. How many rooms do you have in this house or apartment? Do NOT count bathrooms, porches, balconies, foyers, halls, or half-rooms. <input type="radio"/> 1 room <input type="radio"/> 4 rooms <input type="radio"/> 7 rooms <input type="radio"/> 2 rooms <input type="radio"/> 5 rooms <input type="radio"/> 8 rooms <input type="radio"/> 3 rooms <input type="radio"/> 6 rooms <input type="radio"/> 9 or more rooms	
<input type="radio"/> Now married <input type="radio"/> Separated <input type="radio"/> Widowed <input type="radio"/> Never married <input type="radio"/> Divorced		H4. Is this house or apartment — <input type="radio"/> Owned by you or someone in this household with a mortgage or loan? <input type="radio"/> Owned by you or someone in this household free and clear (without a mortgage)? <input type="radio"/> Rented for cash rent? <input type="radio"/> Occupied without payment of cash rent?	
<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.) _____		FOR CENSUS USE <div style="display: flex; justify-content: space-between;"> <div style="width: 24%;"> A. Total persons 0 0 1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 </div> <div style="width: 24%;"> B. Type of unit Occupied _____ Vacant _____ <input type="radio"/> First form <input type="radio"/> Regular <input type="radio"/> Conf'n <input type="radio"/> Usual home elsewhere C1. Vacancy status <input type="radio"/> For rent <input type="radio"/> For seas/rec/occ <input type="radio"/> For sale only <input type="radio"/> For migrant workers <input type="radio"/> Rented or sold, not occupied <input type="radio"/> Other vacant C2. Is this unit boarded up? <input type="radio"/> Yes <input type="radio"/> No </div> <div style="width: 24%;"> D. Months vacant <input type="radio"/> Less than 1 <input type="radio"/> 6 up to 12 <input type="radio"/> 1 up to 2 <input type="radio"/> 12 up to 24 <input type="radio"/> 2 up to 6 <input type="radio"/> 24 or more E. Complete after <input type="radio"/> LR <input type="radio"/> TC <input type="radio"/> QA <input type="radio"/> JC1 <input type="radio"/> P/F <input type="radio"/> RE <input type="radio"/> I/T <input type="radio"/> MV <input type="radio"/> ED <input type="radio"/> EN <input type="radio"/> P0 <input type="radio"/> P3 <input type="radio"/> P6 <input type="radio"/> P1 <input type="radio"/> P4 <input type="radio"/> IA <input type="radio"/> JC2 <input type="radio"/> P2 <input type="radio"/> P5 <input type="radio"/> SM F. Cov. <input type="radio"/> 1b <input type="radio"/> 1a <input type="radio"/> 7 <input type="radio"/> H1 </div> <div style="width: 24%;"> G. DO _____ ID _____ 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 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 </div> </div>	

PLEASE ALSO ANSWER THESE

<p>H8. 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>H14. 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>H20. 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>a. Electricity</p> <p> <input type="text"/> \$ <input type="text"/> .00 Yearly cost — Dollars </p> <p>OR</p> <p> <input type="radio"/> Included in rent or in condominium fee <input type="radio"/> No charge or electricity not used </p>
<p>H9. 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>H15. 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. Gas</p> <p> <input type="text"/> \$ <input type="text"/> .00 Yearly cost — Dollars </p> <p>OR</p> <p> <input type="radio"/> Included in rent or in condominium fee <input type="radio"/> No charge or gas not used </p>
<p>H10. 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>H16. 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>c. Water</p> <p> <input type="text"/> \$ <input type="text"/> .00 Yearly cost — Dollars </p> <p>OR</p> <p> <input type="radio"/> Included in rent or in condominium fee <input type="radio"/> No charge </p>
<p>H11. 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>H17. 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>d. Oil, coal, kerosene, wood, etc.</p> <p> <input type="text"/> \$ <input type="text"/> .00 Yearly cost — Dollars </p> <p>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>H12. Do you have a telephone in this house or apartment?</p> <p> <input type="radio"/> Yes <input type="radio"/> No </p>	<p>H18. Is this house or apartment part of a condominium?</p> <p> <input type="radio"/> Yes <input type="radio"/> No </p>	
<p>H13. 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><i>If you live in an apartment building, skip to H20.</i></p> <p>H19a. Is this house on less than 1 acre?</p> <p> <input type="radio"/> Yes — Skip to H20 <input type="radio"/> No </p> <p>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>	

 9
8
7
6
5
4
3
2
1
0

QUESTIONS FOR YOUR HOUSEHOLD

Page 5

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.

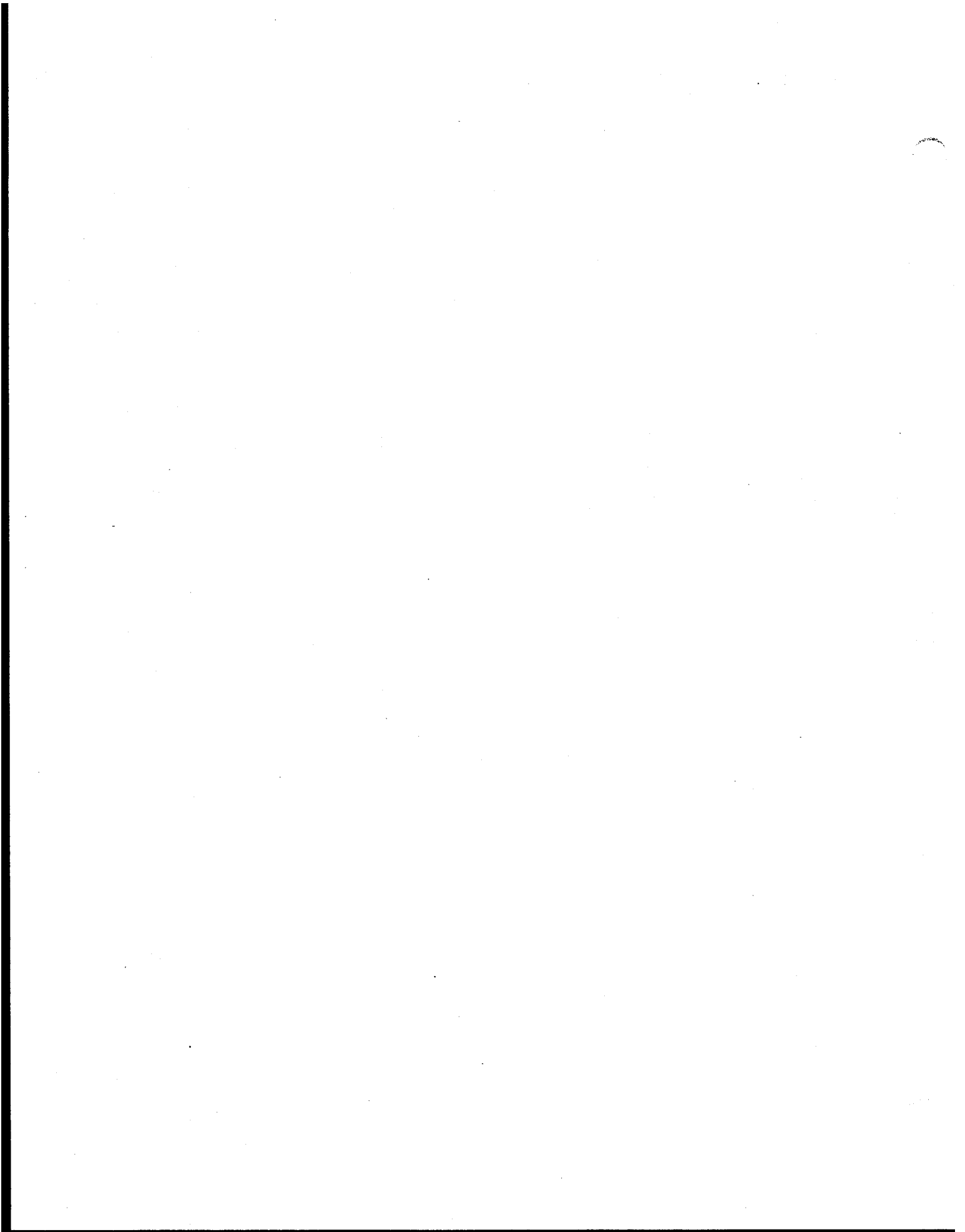
\$.00
Yearly amount — Dollars

Please turn to page 6. ➔

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

<p>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.</p> <p> <input type="radio"/> Car, truck, or van <input type="radio"/> Motorcycle <input type="radio"/> Bus or trolley bus <input type="radio"/> Bicycle <input type="radio"/> Streetcar or trolley car <input type="radio"/> Walked <input type="radio"/> Subway or elevated <input type="radio"/> Worked at home <input type="radio"/> Railroad <input type="radio"/> Ferryboat <input type="radio"/> Other method <input type="radio"/> Taxicab <input type="radio"/> Skip to 28 </p> <p><i>If "car, truck, or van" is marked in 23a, go to 23b. Otherwise, skip to 24a.</i></p> <p>b. How many people, including this person, usually rode to work in the car, truck, or van LAST WEEK?</p> <p> <input type="radio"/> Drove alone <input type="radio"/> 5 people <input type="radio"/> 2 people <input type="radio"/> 6 people <input type="radio"/> 3 people <input type="radio"/> 7 to 9 people <input type="radio"/> 4 people <input type="radio"/> 10 or more people </p>	<p>28. Industry or Employer</p> <p>a. For whom did this person work? If now on active duty in the Armed Forces, fill this circle <input type="radio"/> and print the branch of the Armed Forces.</p> <p>_____</p> <p>(Name of company, business, or other employer)</p> <p>b. What kind of business or industry was this? Describe the activity at location where employed.</p> <p>_____</p> <p>(For example: hospital, newspaper publishing, mail order house, auto engine manufacturing, retail bakery)</p> <p>c. Is this mainly — Fill ONE circle</p> <p> <input type="radio"/> Manufacturing <input type="radio"/> Other (agriculture, construction, service, government, etc.) <input type="radio"/> Wholesale trade <input type="radio"/> Retail trade </p>	<p>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.</p> <p>a. Wages, salary, commissions, bonuses, or tips from all jobs — Report amount before deductions for taxes, bonds, dues, or other items.</p> <p> <input type="radio"/> Yes <input type="radio"/> No \$ _____ .00 Annual amount — Dollars </p> <p>b. Self-employment income from own nonfarm business, including proprietorship and partnership — Report NET income after business expenses.</p> <p> <input type="radio"/> Yes <input type="radio"/> No \$ _____ .00 Annual amount — Dollars </p> <p>c. Farm self-employment income — Report NET income after operating expenses. Include earnings as a tenant farmer or sharecropper.</p> <p> <input type="radio"/> Yes <input type="radio"/> No \$ _____ .00 Annual amount — Dollars </p> <p>d. Interest, dividends, net rental income or royalty income, or income from estates and trusts — Report even small amounts credited to an account.</p> <p> <input type="radio"/> Yes <input type="radio"/> No \$ _____ .00 Annual amount — Dollars </p> <p>e. Social Security or Railroad Retirement</p> <p> <input type="radio"/> Yes <input type="radio"/> No \$ _____ .00 Annual amount — Dollars </p> <p>f. Supplemental Security Income (SSI), Aid to Families with Dependent Children (AFDC), or other public assistance or public welfare payments.</p> <p> <input type="radio"/> Yes <input type="radio"/> No \$ _____ .00 Annual amount — Dollars </p> <p>g. Retirement, survivor, or disability pensions — Do NOT include Social Security.</p> <p> <input type="radio"/> Yes <input type="radio"/> No \$ _____ .00 Annual amount — Dollars </p> <p>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.</p> <p> <input type="radio"/> Yes <input type="radio"/> No \$ _____ .00 Annual amount — Dollars </p>
<p>24a. What time did this person usually leave home to go to work LAST WEEK?</p> <p> <input type="radio"/> a.m. <input type="radio"/> p.m. _____ </p> <p>b. How many minutes did it usually take this person to get from home to work LAST WEEK?</p> <p> <input type="radio"/> _____ Minutes — Skip to 28 </p>	<p>29. Occupation</p> <p>a. What kind of work was this person doing?</p> <p>_____</p> <p>(For example: registered nurse, personnel manager, supervisor of order department, gasoline engine assembler, cake icer)</p> <p>b. What were this person's most important activities or duties?</p> <p>_____</p> <p>(For example: patient care, directing hiring policies, supervising order clerks, assembling engines, icing cakes)</p>	<p>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.</p> <p> <input type="radio"/> None OR \$ _____ .00 Annual amount — Dollars </p>
<p>25. Was this person TEMPORARILY absent or on layoff from a job or business LAST WEEK?</p> <p> <input type="radio"/> Yes, on layoff <input type="radio"/> Yes, on vacation, temporary illness, labor dispute, etc. <input type="radio"/> No </p>	<p>30. Was this person — Fill ONE circle</p> <p> <input type="radio"/> Employee of a PRIVATE FOR PROFIT company or business or of an individual, for wages, salary, or commissions <input type="radio"/> Employee of a PRIVATE NOT-FOR-PROFIT, tax-exempt, or charitable organization <input type="radio"/> Local GOVERNMENT employee (city, county, etc.) <input type="radio"/> State GOVERNMENT employee <input type="radio"/> Federal GOVERNMENT employee <input type="radio"/> SELF-EMPLOYED in own NOT INCORPORATED business, professional practice, or farm <input type="radio"/> SELF-EMPLOYED in own INCORPORATED business, professional practice, or farm <input type="radio"/> Working WITHOUT PAY in family business or farm </p>	
<p>26a. Has this person been looking for work during the last 4 weeks?</p> <p> <input type="radio"/> Yes <input type="radio"/> No — Skip to 27 </p> <p>b. Could this person have taken a job LAST WEEK if one had been offered?</p> <p> <input type="radio"/> No, already has a job <input type="radio"/> No, temporarily ill <input type="radio"/> No, other reasons (in school, etc.) <input type="radio"/> Yes, could have taken a job </p>	<p>31a. Last year (1989), did this person work, even for a few days, at a paid job or in a business or farm?</p> <p> <input type="radio"/> Yes <input type="radio"/> No — Skip to 32 </p> <p>b. How many weeks did this person work in 1989? Count paid vacation, paid sick leave, and military service.</p> <p>_____ Weeks</p> <p>c. During the weeks WORKED in 1989, how many hours did this person usually work each week?</p> <p>_____ Hours</p>	
<p>27. When did this person last work, even for a few days?</p> <p> <input type="radio"/> 1990 <input type="radio"/> 1980 to 1984 <input type="radio"/> 1989 <input type="radio"/> 1979 or earlier <input type="radio"/> 1988 <input type="radio"/> Never worked <input type="radio"/> 1985 to 1987 </p> <p>Go to 28</p>	<p>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.</p>	

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.



APPENDIX F.

Data Products and User Assistance

CONTENTS

Data Products	F-1
Geographic Products	F-3
Other Census Bureau Resources	F-5
Reference Materials	F-4
Sources of Assistance	F-4

The 1990 census data products, being released during 1991-93, are available in a variety of new and traditional media. The Census Bureau has increased the product options available to data users in an effort to meet a variety of requirements and maximize the usefulness of the data. For example, laser discs, called CD-ROM (compact disc—read-only memory), are a new data delivery medium.

The Census Bureau also has expanded services and sources of assistance available to data users. For example, the State Data Center Program has been expanded to include over 1,400 organizations to provide data and services to the public.

This appendix provides a detailed introduction to the 1990 census data products and related materials, such as maps and reference publications. It concludes by describing sources of assistance and other Census Bureau data available to the public.

DATA PRODUCTS

Printed reports and computer tape files traditionally are the most widely used products. The Census Bureau also offers data on microfiche, on CD-ROM laser discs, and through its online service, CENDATA™. These various products are described below. For information about prices and how to order, write or call Customer Services. (See the "Sources of Assistance" section for the address and phone number.)

The data products present statistics about the subjects covered in the 1990 census questionnaires. These subjects are listed in figure 1, page F-8. As the figure shows, there are 100-percent subjects (those covered in questions asked of everyone or about every housing unit) and sample subjects (those covered in questions asked at about one out of every six housing units). Generally, a data product presents either 100-percent data prepared by tabulating the responses to the 100-percent questions from all questionnaires, or sample data prepared by tabulating only the responses to the 100-percent and sample questions from the "long-form" questionnaires. Two report series, 1990 CPH-3 and 1990 CPH-4 (see figure 2, page F-9), present both 100-percent and sample data.

Printed Reports

Printed reports are the most convenient and readily available source of data for most census users. The Census Bureau releases the reports in several series (see figure 2) that are grouped under three broad titles: *1990 Census of Population and Housing* (1990 CPH), *1990 Census of Population* (1990 CP), and *1990 Census of Housing* (1990 CH). There also are reports, not reflected in figure 2, for the outlying areas of the Pacific. The reports are sold by the Superintendent of Documents, U.S. Government Printing Office. (See the "Sources of Assistance" section for the address and phone number.)

In several series, there are separate reports for each State. The geographic coverage of the State reports is listed in figure 2. The United States summaries for these report series contain, for the most part, data for the United States, regions, divisions, States, metropolitan areas (MA's), urbanized areas (UA's), counties, American Indian and Alaska Native areas, places with 10,000 or more persons, and other large substate areas (for example, county subdivisions, such as towns and townships, with 10,000 or more persons in selected States).

Report series that present data for small areas, such as census tracts, contain limited subject-matter detail (for example, counts of people by age ranges—under 5 years, 5 to 9 years, etc.—rather than by single years). Report series that include greater amounts of subject-matter detail include less geographic detail.

Computer Tape Files

The Census Bureau provides more data on tape and other machine-readable products than in printed reports. These products are sold by the Census Bureau's Customer Services. There are several general types of data files released on computer tape (available on both reels and cartridges). They are introduced below, and more information is presented in figures 3 and 4, pages F-12 through F-14.

Public Law 94-171 Data—This data file presents the counts designed and formatted for use in legislative redistricting. These counts also are available on CD-ROM and paper listings. Excerpts are available on CENDATA™. The counts, for areas as small as blocks, census tracts, and voting districts, include totals for population, race groups, persons of Hispanic origin, population 18 years and over, and housing units. (See figure 4.)

Summary Tape Files (STF's)— These computer tape files provide statistics with greater subject-matter detail than printed reports. They also present statistics for some types of areas, such as block groups and blocks, that are not included in the reports. (See figure 3.)

Here are some important features of STF's:

- Each STF presents a particular set of data tables for specific types of geographic areas.
- Each STF has three or more file types (indicated by a letter suffix attached to the STF number) that differ in the geographic levels reported, but contain the same data detail.
- STF's 1 and 2 contain 100-percent data, and STF's 3 and 4 offer sample data.
- STF's 1 and 3 report on smaller areas and offer less data detail than STF's 2 and 4.
- STF's 1 through 4 offer greater data detail than the 1980 STF's 1 through 4.

Subject Summary Tape Files (SSTF's)—These files are the source of the subject reports and provide greater subject-matter detail than the STF's. They present data for the United States, regions, and divisions, and, in some cases, also for States, counties, and large cities. (See figure 4.)

Public Use Microdata Sample (PUMS) Files—These computer tape files (see figure 4) contain data from samples of long-form housing-unit records ("microdata") for large geographic areas. Each sample housing-unit record includes essentially all the 1990 census data collected about each person in a sample household and the characteristics of the housing unit. Information that could be used to identify an individual or a housing unit is not included in the file.

Microdata files enable users to prepare customized tabulations and cross-tabulations of most items on the census questionnaire. There are two standard PUMS files:

- A file presenting a 5-percent sample of housing units in which each household record includes codes to let the user know in what area, such as a group of counties, a single county, or a place, the household is located. Each area identified must have a population of at least 100,000 and boundaries that do not cross State lines.
- A file presenting a 1-percent sample of housing units. Its household records include codes associating them with MA's and other large areas, the boundaries of which may cross State lines. (For the 1980 census, there were two files with 1-percent samples. The 1-percent sample showing data for selected urbanized areas and other large areas will not be produced for the 1990 census.)

There also is a special 3-percent "elderly" file with the same geography as the 5-percent sample. Included are households with at least one person age 60 or more and all members of those households.

Other Special Computer Tape Files—Other files include the Census/ Equal Employment Opportunity (EEO) File and the County-to-County Migration File. (See figure 4.) The Census Bureau may prepare additional special files.

Microfiche

All printed reports are offered on microfiche from Customer Services soon after they are published. Plans to prepare microfiche versions of selected other products were canceled, so that more products could be produced on CD-ROM.

Compact Disc—Read-Only Memory (CD-ROM)

For the 1990 census, the Public Law (P.L.) 94-171 file; an extract of STF 1B that presents selected statistics for blocks; and STF's 1A, 1C, 3A, 3B, and 3C are available on CD-ROM. The Census Bureau also offers on CD-ROM: PUMS Files, SSTF's, Census EEO File, and County-to-County Migration File. (One 4 3/4-inch CD-ROM, a type of optical or laser disc, can hold the contents of approximately 1,600 flexible diskettes, or three or four high-density computer tapes.)

Online Information Systems

The Census Bureau began CENDATA, its online information service, in 1984. CENDATA is accessible through two information vendors, CompuServe and DIALOG. A number of Census Bureau reports, in whole or in part, are offered online. For the 1990 census, CENDATA provides up-to-date information about the availability of data products and carries selections of State, county, MA, and place data from the P.L. 94-171 tape file and STF's 1 and 3. CENDATA also offers the entire Census EEO File.

Custom Data Products

These products are for users who require unique tabulations that are not included in standard products; for example, information for locally defined geographic areas. Users also can order special microdata files.

The cost of preparing custom products must be paid by the users who request them. Any data that the Census Bureau provides in these products are subject to the same standards applied to other data to ensure that confidential individual information is not revealed.

User-Defined Areas Program (UDAP) Tabulations—UDAP can provide a set of predefined data tables for locally defined areas that do not correspond to standard 1990 census geographic areas. Users identify the geographic areas of interest to them by delineating boundaries around groupings of census blocks on 1990 census County Block Maps or by electronically submitting the geographic components of their area of interest. (A contact for more information is given in the "Sources of Assistance" section.)

Special Tabulations—The Census Bureau can prepare special data tabulations for any specific geographic or subject-matter area. Users should rely on standard reports, tapes, microfiche, or user-defined area tabulations whenever possible, since special tabulations tend to be substantially more expensive and take time to arrange and produce. (Contacts for more information are given in the "Sources of Assistance" section.)

GEOGRAPHIC PRODUCTS

Maps

Census Bureau maps are necessary for virtually all uses of small-area 1990 census data. They are needed to locate the specific geographic areas for which the census provides data and to study the spatial relationship of the data for analytic purposes. The Census Bureau prepares a variety of 1990 census maps. Among the most useful are these four series:

County Block Maps—These maps show census blocks and their numbers; boundaries for statistical and governmental entities, such as census tracts and places; and physical features. The P.L. 94-171 version of these maps also shows voting district boundaries in those States that furnished them. The maps are prepared on electrostatic plotters by county (or equivalent entity) with one or more map sheets each, depending on the size and shape of the area and the density of the block pattern. An average county requires 20 map sheets. The maps may be purchased from Customer Services.

County Subdivision Outline Maps—Maps in this State-based series present the boundaries of the counties, county subdivisions, places, American Indian and Alaska Native areas (including off-reservation trust lands), tribal designated statistical areas, and tribal jurisdiction statistical areas. Electrostatic-plotter copies are available for purchase from Customer Services. Also, they appear on multiple page-size sheets in the State reports of these series: 1990 CPH-1, 1990 CPH-2, 1990 CPH-5, 1990 CP-1, 1990 CP-2, 1990 CH-1, and 1990 CH-2.

Census Tract/Block Numbering Area (BNA) Outline Maps—Maps in this county-based series depict census tract or BNA boundaries and numbers, and the features

underlying the boundaries. They also show governmental units in relation to the census tracts/BNA's. The Superintendent of Documents sells printed copies.

Voting District Outline Maps—Maps in this county-based series depict voting district boundaries (for those counties for which States furnished boundary information) and the features underlying the boundaries. They also show governmental unit boundaries in relation to the voting districts. They are prepared on electrostatic plotters and sold by Customer Services.

Geographic Publications

The *Geographic Identification Code Scheme* report in the 1990 CPH-R series shows the 1990 census geographic area codes and Federal information processing standards (FIPS) codes, as appropriate, for States, metropolitan areas, counties, county subdivisions, places, American Indian and Alaska Native areas, and other entities, along with some descriptive information about the codes. The code scheme also is offered on computer tape.

Machine-Readable Geographic Files

All 1990 census summary tape files include 1990 census geographic area codes, FIPS codes, certain area names, land and inland water area in square kilometers, geographic coordinates for an internal point for each entity, and other geographic information.

The Census Bureau developed an automated geographic data base, known as the TIGER (Topologically Integrated Geographic Encoding and Referencing) System, to produce the geographic products for the 1990 census. TIGER provides coordinate-based digital map information for the entire United States, Puerto Rico, the U.S. Virgin Islands, and the Pacific territories over which the United States has jurisdiction.

The TIGER System has significantly improved the utility of 1990 census maps and geographic reference products. Extract files generated from the TIGER System permit users, with appropriate software, to perform such tasks as linking the statistical data in the P.L. 94-171 file or the STF's and displaying selected characteristics on maps or a video display screen at different scales and with whatever boundaries they select for any geographic area of the country. For example, a map for a particular county could show the distribution of the voting age population by city block.

The first extract of selected geographic and cartographic information intended for computer applications, such as plotting maps and building geographic information systems, is called the TIGER/Line™ files. TIGER/Line™ files contain attributes for the segments of each boundary and feature (for example, roads, railroads, and rivers), including 1990 census geographic codes for

adjacent areas, latitude/longitude coordinates of segment end points and the curvature of segments, the name and type of the feature, and the relevant census feature class code identifying the feature segment by category. TIGER/Line™ files also furnish address ranges and associated ZIP Codes for each side of street segments in major urban areas; provide the names of landmarks, such as lakes and golf courses; and include other information.

TIGER/Line™ files and other TIGER System extracts, such as TIGER/Boundary™ and TIGER/DataBase™, are released on computer tape and, in some cases, CD-ROM. For information on TIGER extract files, contact Customer Services.

REFERENCE MATERIALS

The Census Bureau issues several reference publications for data users. Some are sold by the Superintendent of Documents; others are distributed free by Customer Services. Addresses and phone numbers for the Superintendent of Documents and Customer Services are given in the following section.

- *1990 Census of Population and Housing, Guide.* This guide, in the 1990 CPH-R report series, provides detailed information about all aspects of the census and a comprehensive glossary of census terms. Sold by the Superintendent of Documents, U.S. Government Printing Office.
- *1990 Census of Population and Housing Tabulation and Publication Program.* A free report describing 1990 census products, comparing 1990 products with those of 1980, and more. Request from Customer Services.
- *Census '90 Basics.* A free booklet covering how the 1990 census data were collected and processed, the full range of data products, the maps and geographic files, and more, but with less detail than the Guide (above). Request from Customer Services.
- *Census ABC's—Applications in Business and Community.* A free booklet that highlights key information about the 1990 census and illustrates a variety of ways the data can be used. Request from Customer Services.
- *Strength in Numbers.* A free, tabloid-size booklet designed to assist people in using 1990 census data in redistricting. Among other features, it includes illustrations of maps and Public Law 94-171 counts. Request from Customer Services.
- *TIGER: The Coast-to-Coast Digital Map Data Base.* A free booklet describing the structure and uses of the Census Bureau's TIGER System. Request from Customer Services.

- *Census and You.* The Census Bureau's monthly newsletter for data users. It reports on the latest 1990 census developments, selected new publications and computer tape files, other censuses and surveys, developments in services to users, and upcoming conferences and training courses. Subscriptions are sold by the Superintendent of Documents, U.S. Government Printing Office.

- *Monthly Product Announcement.* A free monthly listing of all new Census Bureau publications; microfiche; maps; data files on tape, diskettes, or CD-ROM; and technical documentation. To subscribe, contact Customer Services.

- *Census Catalog and Guide.* A comprehensive annual description of data products, statistical programs, and services of the Census Bureau. It provides abstracts of the publications, data files, microfiche, maps, and items online. In addition, the Catalog/Guide offers such features as information about censuses and surveys and telephone contact lists of data specialists at the Census Bureau, the State Data Centers, and other data processing service centers. It is sold by the Superintendent of Documents, U.S. Government Printing Office.

Users also can get listings of new Census Bureau products, updated daily, by subscribing to the *Daily List*. This information and selected statistics are available online through CENDATA™, the Census Bureau's online information service. For more information, contact Customer Services.

SOURCES OF ASSISTANCE

U.S. Bureau of the Census

The Census Bureau's Customer Services sells most of the machine-readable data products, microfiche, and maps described earlier. (The 1990 census printed reports are sold by the Superintendent of Documents, as noted below.) Also, users may consult with specialists at the Census Bureau's Washington headquarters and its 12 regional offices. From time to time, the specialists also conduct workshops, seminars, and training courses.

Washington, DC, Contacts—To order products, for a telephone contacts list of Census Bureau specialists, and for general information: Customer Services, U.S. Bureau of the Census, Washington, DC 20233, telephone 301-763-4100 (FAX number, 301-763-4794).

For User-Defined Areas Program (UDAP) information: UDAP Staff, Decennial Planning Division, U.S. Bureau of the Census, Washington, DC 20233, telephone 301-763-4282.

For special tabulation information: Population—Rosemarie Cowan, Population Division, U.S. Bureau of the Census, Washington, DC 20233, telephone 301-763-5476; Housing—William Downs, Housing and Household Economic Statistics, U.S. Bureau of the Census, Washington, DC 20233, telephone 301-763-8553.

Regional Office Contacts—

Atlanta, GA	404-730-3833
Boston, MA	617-565-7078
Charlotte, NC	704-344-6144
Chicago, IL	312-353-0980
Dallas, TX	214-767-7105
Denver, CO	303-969-7750
Detroit, MI	313-354-4654
Kansas City, KS	913-236-3711
Los Angeles, CA	818-904-6339
New York, NY	212-264-4730
Philadelphia, PA	215-597-8313
Seattle, WA	206-728-5314

Superintendent of Documents, U.S. Government Printing Office

The Superintendent of Documents handles the sale of most of the Federal Government's publications, including 1990 census reports. To order reports and for information: Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, telephone 202-783-3238.

Other Sources of Products and Services

State Data Centers—The Census Bureau furnishes data products, training in data access and use, technical assistance, and consultation to all States, the District of Columbia, Guam, Puerto Rico, and the U.S. Virgin Islands. State Data Centers, in turn, offer publications for reference, printouts from computer tape, specially prepared reports, maps, and other products and assistance to data users. For a list of the State Data Centers, see the *Census Catalog and Guide* or contact Customer Services. The list also notes organizations in States participating in the Census Bureau's Business/ Industry Data Center (BIDC) Program. The BIDC's help business people, economic development planners, and other data users obtain and use data.

Census Information Center (CIC)—The CIC program provides data-related services for nationally based nonprofit organizations that represent minorities or other segments of the population who have been historically undercounted in decennial censuses. The participants include social service, business, professional, civil rights, educational, and religious groups. Through the project, five nonprofit groups now offer their clientele reports, computer tape printouts, and other information from the

Census Bureau. To learn more about the program, write to the Census Information Center Branch, Data User Services Division, Bureau of the Census, Washington, DC 20233, or call 301-763-1384.

National Clearinghouse—The National Clearinghouse for Census Data Services is a listing of private companies and other organizations that offer assistance in obtaining and using data released by the Census Bureau. For a list of participants in the National Clearinghouse, see the *Census Catalog and Guide* or contact Customer Services.

Depository Libraries—There are 1,400 libraries that receive (from the Government Printing Office) Federal publications that they think their patrons will need. Often some of these publications are Census Bureau reports. The Census Bureau provides free reports to an additional 120 census depository libraries. Also, many libraries purchase census reports and maps for their areas. The *Census Catalog and Guide* includes a list of all depository libraries.

OTHER CENSUS BUREAU RESOURCES

The Census Bureau has more to offer than just the results of the census of population and housing. Through other censuses, surveys, and estimates programs, it compiles and issues (in reports, computer tape, 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, ancestry.
- **Business and industry:** Number of employees, total payroll, sales and receipts, 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, mortgage costs.
- **Farms:** Number, acreage, livestock, crop sales.
- **Governments:** Revenues and expenditures, taxes, employment, pension funds.
- **Foreign trade:** Exports and imports, origin and destination, units shipped.
- **Other nations:** Population, birth rates, death rates, literacy, 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 results as often as every month.

Many of the monthly "economic indicators" that measure how the Nation is doing come directly or indirectly from the Census Bureau. Examples: employment and unemployment; housing starts; wholesale 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 below. Data users will find more information about them and descriptions of their data products in the annual *Census Catalog and Guide*. Also, special guides and brochures are prepared for most of them. Contact the Census Bureau's Customer Services for more information.

Current Demographic and Housing Programs

Two types of current programs complement the 10-year census: population estimates and surveys. The total population of the United States is estimated monthly; the population of States, counties, and metropolitan areas is estimated annually; and the population of places and other governmental units is estimated every 2 years. Projections of future population are made at the national and State levels.

The Census Bureau's many household surveys update population and housing characteristics at the national level and sometimes for States and metropolitan areas, as well. These surveys also obtain many characteristics not included in the 10-year census. The Current Population Survey is taken monthly; the American Housing Survey national sample is taken biennially, the American Housing Survey metropolitan sample is taken in 44 areas, 11 per year in a 4-year cycle; most other surveys are annual or less frequent.

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.

Several key statistics are tabulated for all industries covered in the censuses. They are 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. 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.

Agriculture Census and Surveys

The agriculture census is conducted concurrently with the economic censuses. It is the only source of uniform agriculture data at the county level. 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.

Results of three surveys—the 1988 Farm and Ranch Irrigation Survey, 1988 Census of Horticulture Specialties, and 1988 Agricultural Economics and Land Ownership Survey—are published in conjunction with the 1987 Census of Agriculture. Also, the Census Bureau regularly issues reports from a survey on cotton ginnings.

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 U.S. Virgin Islands 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 U.S. Virgin Islands, and other U.S. possessions.

Other Statistical Activities

The Census Bureau also offers international data. It maintains an international data base which 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*, the *County and City Data Book* (published every 5 years), and the *State and Metropolitan Area Data Book* (published approximately every 4 years).

Figure 1. 1990 Census Content

100-PERCENT COMPONENT	
Population	Housing
Household relationship	Number of units in structure
Sex	Number of rooms in unit
Race	Tenure—owned or rented
Age	Value of home or monthly rent
Marital status	Congregate housing (meals included in rent)
Hispanic origin	Vacancy characteristics

SAMPLE COMPONENT	
Population	Housing
<i>Social characteristics:</i>	Year moved into residence
Education—enrollment and attainment	Number of bedrooms
Place of birth, citizenship, and year of entry into U.S.	Plumbing and kitchen facilities
Ancestry	Telephone in unit
Language spoken at home	Vehicles available
Migration (residence in 1985)	Heating fuel
Disability	Source of water and method of sewage disposal
Fertility	Year structure built
Veteran status	Condominium status
<i>Economic characteristics:</i>	Farm residence
Labor force	Shelter costs, including utilities
Occupation, industry, and class of worker	
Place of work and journey to work	
Work experience in 1989	
Income in 1989	
Year last worked	

NOTE: Questions dealing with the subjects covered in the 100-percent component were asked of all persons and housing units. Those covered by the sample component were asked of a sample of the population and housing units.

Figure 2. 1990 Census Printed Reports

Series	Title	Report(s) issued for	Description	Geographic areas
1990 CENSUS OF POPULATION AND HOUSING (1990 CPH)				
100-Percent Data				
1990 CPH-1	Summary Population and Housing Characteristics	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
1990 CPH-2	Population and Housing Unit Counts	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)
100-Percent and Sample Data				
1990 CPH-3	Population and Housing Characteristics for Census Tracts and Block Numbering Areas	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
1990 CPH-4	Population and Housing Characteristics for Congressional Districts of the 103rd Congress	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
Sample Data				
1990 CPH-5	Summary Social, Economic, and Housing Characteristics	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
1990 CENSUS OF POPULATION (1990 CP)				
100-Percent Data				
1990 CP-1	General Population Characteristics	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

Figure 2. 1990 Census Printed Reports—Con.

Series	Title	Report(s) issued for	Description	Geographic areas
1990 CENSUS OF POPULATION (1990 CP)—Con.				
100-Percent Data—Con.				
1990 CP-1-1A	General Population Characteristics for American Indian and Alaska Native Areas	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
1990 CP-1-1B	General Population Characteristics for Metropolitan Areas	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
1990 CP-1-1C	General Population Characteristics for Urbanized Areas	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
Sample Data				
1990 CP-2	Social and Economic Characteristics	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
1990 CP-2-1A	Social and Economic Characteristics for American Indian and Alaska Native Areas	U.S.	Statistics generally on sample population subjects	American Indian and Alaska Native areas, as for CP-1-1A
1990 CP-2-1B	Social and Economic Characteristics for Metropolitan Areas	U.S.	Statistics generally on sample population subjects	Individual MA's, as for CP-1-1B
1990 CP-2-1C	Social and Economic Characteristics for Urbanized Areas	U.S.	Statistics generally on sample population subjects	Individual UA's, as for CP-1-1C
1990 CP-3	Population Subject Reports	Selected subjects	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

Figure 2. 1990 Census Printed Reports—Con.

Series	Title	Report(s) issued for	Description	Geographic areas
1990 CENSUS OF HOUSING (1990 CH)				
100-Percent Data				
1990 CH-1	General Housing Characteristics	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 char- acteristics	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
1990 CH-1-1A	General Housing Characteristics for American Indian and Alaska Native Areas	U.S.	Detailed statistics on units in structure, value and rent, number of rooms, tenure, and vacancy char- acteristics	American Indian and Alaska Native areas; i.e., American Indian reservations, trust lands, tribal jurisdiction stati- cal areas (Oklahoma), tribal designated statistical areas, Alaska Native village statisti- cal areas, and Alaska Native Regional Corporations
1990 CH-1-1B	General Housing Characteristics for Metropolitan Areas	U.S.	Detailed statistics on units in structure, value and rent, number of rooms, tenure, and vacancy char- acteristics	Individual MA's. For MA's split by State boundaries, summaries are provided both for the parts and for the whole MA
1990 CH-1-1C	General Housing Characteristics for Urbanized Areas	U.S.	Detailed statistics on units in structure, value and rent, number of rooms, tenure, and vacancy char- acteristics	Individual UA's. For UA's split by State boundaries, summaries are provided both for the parts and for the whole UA
Sample Data				
1990 CH-2	Detailed Housing Characteristics	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 sub- divisions of 2,500 or more inhabitants in selected States, Alaska Native areas, and State parts of American Indian areas
1990 CH-2-1A	Detailed Housing Characteristics for American Indian and Alaska Native Areas	U.S.	Statistics generally on sample housing subjects	American Indian and Alaska Native areas, as in 1990 CH-1-1A
1990 CH-2-1B	Detailed Housing Characteristics for Metropolitan Areas	U.S.	Statistics generally on sample housing subjects	Individual MA's, as in 1990 CH-1-1B
1990 CH-2-1C	Detailed Housing Characteristics for Urbanized Areas	U.S.	Statistics generally on sample housing subjects	Individual UA's, as in 1990 CH-1-1C
1990 CH-3	Housing Subject Reports	Selected subjects	Reports on housing census subjects such as structural and utilization characteristics in metro- politan areas	Generally limited to U.S., regions, and divisions; for some reports, other highly populated areas such as States, MA's, counties, and large places

Figure 3. 1990 Census Summary Tape Files

**Summary Tape File
(STF 1A, 1B, etc.)
and data type
(100 percent or
sample)¹**

		Geographic areas	Description
STF 1 (100 percent)	A ²	States, counties, county subdivisions, places, census tracts/ block numbering areas (BNA's), block groups (BG's). Also Alaska Native areas and State parts of American Indian areas	Over 900 cells/ items of 100-percent population and housing counts and characteristics for each geographic area
	B ²	States, counties, county subdivisions, places, census tracts/ BNA's, BG's, blocks. Also Alaska Native areas and State parts of American Indian areas	
	C ²	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	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
	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 ²	States, counties, county subdivisions, places, census tracts/ BNA's, BG's. Also Alaska Native areas and State parts of American Indian areas	Over 3,300 cells/ items of sample population and housing characteristics for each geographic area
	B ²	Five-digit ZIP Codes within each State	
	C ²	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	

Figure 3. 1990 Census Summary Tape Files—Con.

Summary Tape File
(STF 1A, 1B, etc.)
and data type
(100 percent or
sample)¹

	Geographic areas	Description
STF 4 (Sample)	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	Over 8,500 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.
	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	
	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	

Note: STF 420 Place of Work 20 Destinations File. This is a new file for 1990. Comparable data were included as part of STF 4 in 1980, but for 1990 this is a separate file and must be ordered and purchased separately from STF 4. The file contains 20 place of work destinations for each county or county equivalent, minor civil division, place of 10,000 or more persons, and census tract or block numbering area. Data are also provided for each major race and for workers of Hispanic origin cross-classified by race. The geographic level of the destinations varies. A destination may be a place, county, balance of county, metropolitan area, or balance of metropolitan area.

¹Similar STF's will be prepared for Puerto Rico and the U.S. Virgin Islands.

²Also available on laser disc (CD-ROM). STF 1B CD-ROM presents only part of the data for blocks and other areas in the tape file.

Figure 4. Other 1990 Census Data Products

Title	Description	Geographic areas
Subject Summary Tape Files	Various computer tape files used to produce the subject reports (1990 CP-3 and 1990 CH-3 series).	U.S., regions, divisions, States, metropolitan areas (MA's), and large counties and places
Public Law 94-171 Data File (redistricting data)	Counts by total, race, and Hispanic origin for the total population and population 18 years old and over, and counts of housing units. Available on tape, CD-ROM, and paper listings	States, counties, county subdivisions, places, census tracts/block numbering areas (BNA's), block groups (BG's), and blocks; voting districts where States have identified them for the Census Bureau; and American Indian and Alaska Native areas
Census/ Equal Employment Opportunity (EEO) Special File	Sample tabulations showing detailed occupations and educational attainment data by age; cross tabulated by sex, Hispanic origin, and race	Counties, MA's, places of 50,000 or more inhabitants
County-to-County Migration File	Summary statistics for all intra-state county-to-county migration streams and significant inter-state county-to-county migration streams. Each record will include codes for the geographic area of destination, and selected characteristics of the persons who made up the migration stream	States, counties
Public Use Microdata Sample (PUMS) Files	Machine-readable files containing a sample of individual long-form census records showing most population and housing characteristics but with identifying information removed	
5 Percent—County Based		County groups, counties, county subdivisions, and places with 100,000 or more inhabitants
1 Percent—Metropolitan Areas (1990)		MA's and other large areas with 100,000 or more inhabitants
3 Percent—Elderly	As above, but includes only households with at least one person age 60 or more	Same as for 5-percent sample
User-Defined Areas Tabulations	A set of standard tabulations provided on printouts, tapes, or other products with maps and narrative (if requested)	User-defined areas created by aggregating census blocks
Special Tabulations	User-defined tabulations for specified geographic areas provided on printouts, tapes, or other products	User-defined areas or standard areas

APPENDIX G. Maps

CONTENTS

Census Tract/Block Numbering Area

Outline Map Sample	G-4
County Block Map Sample	G-3
County Subdivision Map Sample	G-5
Legend	G-2
Map Descriptions	G-1
Terminology	G-1

There are three map series that relate to the geographic entities for which the Census Bureau provides statistics in the STF 420 data tapes. Copies of county block maps and county subdivision maps will be reproduced on electrostatic plotters in response to orders received by Customer Services, Data User Services Division, Bureau of the Census, Washington, DC 20233 (301) 763-4100. Census tract/block numbering area outline maps may be ordered from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

MAP DESCRIPTIONS

County Block Maps—These maps depict each county on one or more map sheets at various scales, depending on the county's areal size and the density of the block pattern. (Most counties include multiple map sheets, including inset maps for densely settled areas.) The maps display block numbers and feature identifiers as well as the boundaries, names, and codes for the legal and statistical entities in the county. Each county includes an index map sheet that shows the locations of the map sheets comprising the county set.

Census Tract/Block Numbering Area Outline Maps—These county-based maps depict the boundaries and codes of census tracts or block numbering areas, the features and feature names underlying the boundaries, and the boundaries and names of counties, county subdivisions, places, and American Indian/Alaska Native areas. Map scales vary to minimize the number of sheets. The maps may include one or more insets for densely settled areas.

County Subdivision Maps—These State-based maps depict the boundaries and names of all counties and statistically equivalent areas, county subdivisions, and places. (The Census Bureau also will publish sectionalized versions of these maps in most 1990 census reports.)

TERMINOLOGY

Refer to appendix A for an explanation of the types of areas. Two terms used in the legend require explanation:

Asterisk(*)—A symbol following a block number to indicate the block number is repeated elsewhere in the block or is shown partially on an adjacent map sheet or on an inset map.

Fishhook(↔)—A map symbol drawn across a physical feature (creek, brook, etc.) or boundary on census maps to show that the areas on both sides of the feature or boundary belong to the same census block.

Legend

LEGEND

SYMBOL DESCRIPTION	SYMBOL	NAME STYLE	FIPS CODE	CENSUS CODE
International	*****	CANADA		
American Indian Reservation	XXXXXXXX	CAMPO RSVN	10522	(045C)
Trust Land	XXXXXXXX		10522	(045C*)
Alaska Native Regional Corporation	*****	ALEUT ANRC		(14)
Alaska Native Village Statistical Area, Tribal Jurisdiction Statistical Area, or Tribal Designated Statistical Area	*****	KAW TUSA	38870	(534C)
State ¹	////////	NEW YORK	(36)	
County ¹	EEEEEEEE	ERIE COUNTY	(029)	
Minor Civil Division ²	*****	YORK TWP	83908	(070)
Census County Division	*****	KULA DIV	91990	(03C)
Incorporated Place	*****	Rome City	63418	(3120)
Census Designated Place	*****	Zena	84187	(410C)
Corporate Corridor	*****	1860		
Census Tract or Block Numbering Area	*****	5702.01		
Block Number (With Asterisk) ³	200-			
Fishhook ⁴	↔			
Crew-of-Vessel	↑ Tract ↓ Block	12130.99 ↓ 9012		

Note: An international boundary also depicts a state boundary and a county boundary; a state boundary also depicts a county boundary. The symbols for all other coincident boundaries are shown alternately, as shown in the examples:
e.g.: *****

FEATURE	SYMBOL	NAME STYLE
Interstate Highway and Limited Access Road ⁵	=====	Interstate 835
Other Highway ⁵	=====	Rte 101
City Street, Other Connecting Road, or Dirt Road ⁵	=====	Marsh Ln
Jeep Trail, Walkway, or Stairway	-----	Labelle Walk
Railroad	+++++	
Ferry Crossing	----- FERRY -----	
Pipeline or Power Transmission Line	
Ridge, Fence, Canyon, or Other Physical Feature	-----	RIDGE
Nonvisible Boundary or Other Feature Not Elsewhere Classified	=====	PROPERTY LINE
Perennial Stream, or Shoreline of Perennial Water Body	~~~~~	Tumbling Creek
Intermittent Stream, or Shoreline of Intermittent Water Body	~~~~~	Piney Creek
Large River, Lake, or Other Water Body	~~~~~	Pleasant Lake
Military Installation	N/A	Fort Belvoir
Park (National, State, or Local)	=====	Yosemite
Mountain Peak	▲	Pikes Peak
Inset Area	A	

¹ State or County; or their equivalent area for statistical purposes.

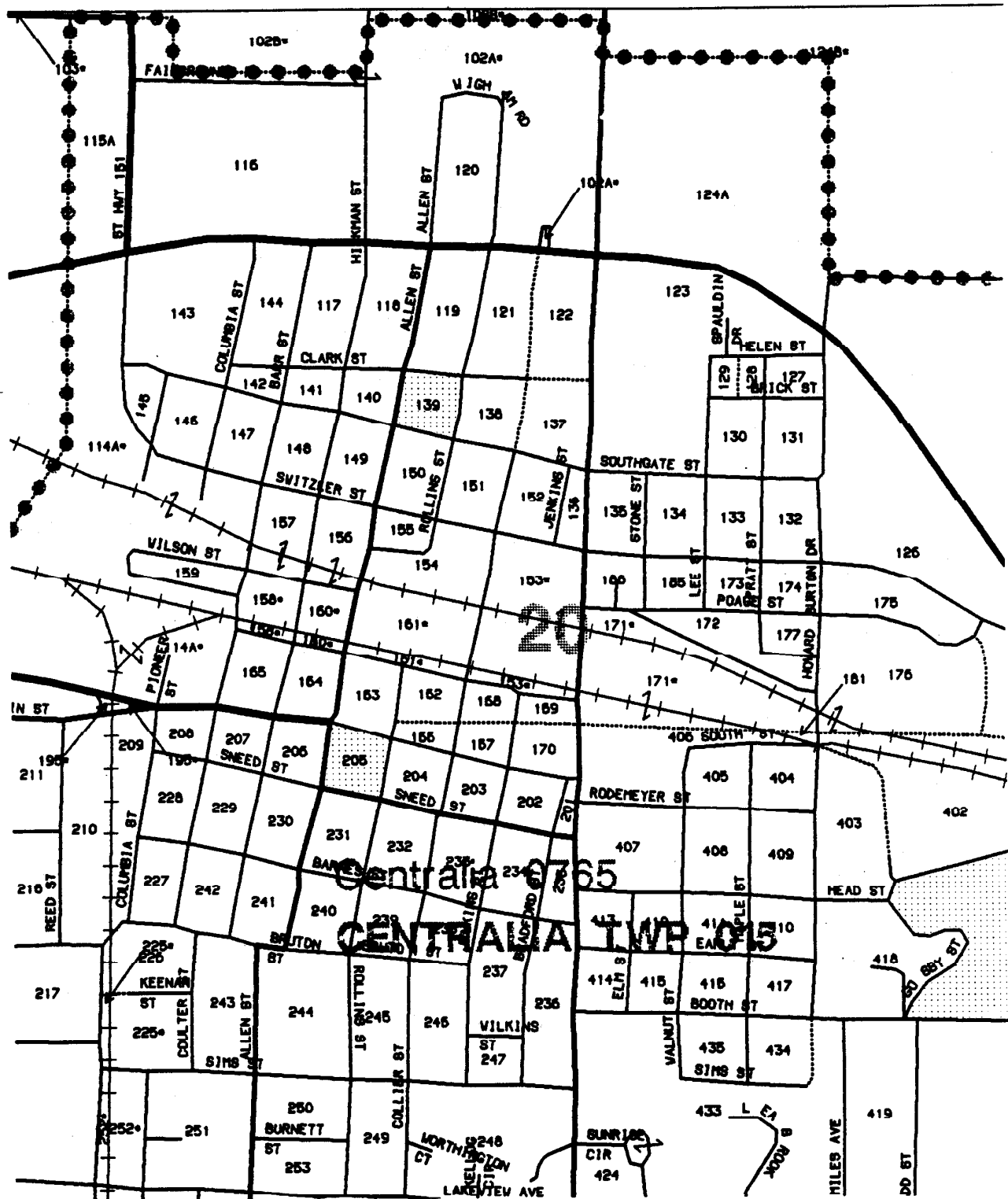
² A five-spoked asterisk following a minor civil division indicates that the minor civil division is coextensive with an incorporated place and has the same name.

³ An asterisk following a block number indicates that the block number is repeated elsewhere in the block or is shown partially on an adjacent map sheet.

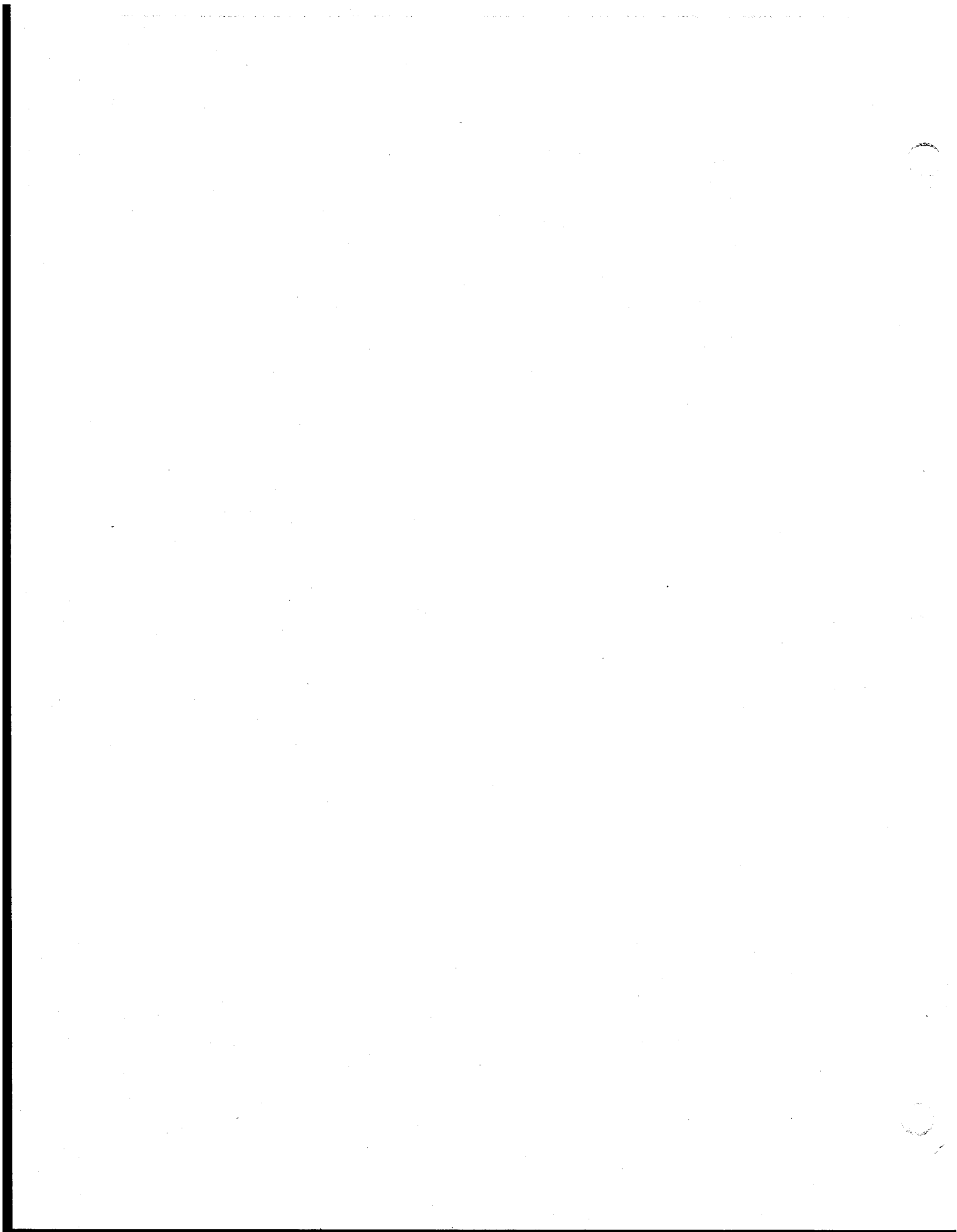
⁴ A fishhook across a map feature or boundary indicates that the areas on both sides of the feature or boundary belong to the same census block.

⁵ A X symbol indicates that there was insufficient space to plot a road name. Road names in parentheses indicate that the road has more than one name.

County Block Map Sample







APPENDIX H. Record Layout of Machine-Readable Data Dictionary

CONTENTS

Geographic Description.....	H-1
Table (Matrix) Description.....	H-2

This appendix provides the record layout for the machine-readable data dictionary file that accompanies each data tape. This data dictionary was developed as a "generic" dictionary that, with some programming, could be converted for use with specific software packages.

GEOGRAPHIC DESCRIPTION

Geographic Record 1—Field Mnemonic, Size, and Type

Position	Description
1-2	Identifier "G1" (Geographic Record 1)
3	Blank
4-11	Field mnemonic (left justified)
12	Blank
13-14	Field size (right justified)
15	Blank
16-18	Data type (left justified)
	Note: Legal entries are A, N, and A/N
19	Blank
20-24	Begin position (right justified) (Begin position in relation to the entire record)
25	Blank
26-30	Relative begin position (right justified) (Begin position in relation to the record segment)

Example 1

```
G1 FILEID      8 A/N      1      1 0
G2      1 File Identification
```

Example 2

```
G1 PSADC      2 A/N    289    289 0
G2    289 Political/Statistical Area Description Code
G3    289      01 State or State equivalent - no status is appended to the name
G3    289      01 of the entity in census publications and related data products
G3    289      04 Borough - county equivalent in Alaska; "Borough" is appended t
G3    289      04 o the name of the entity in census publications and related da
G3    289      04 ta products
G3    289      05 Census area - county equivalent in Alaska; "Census Area" is ap
G3    289      05 pended to the name of the entity in census publications and re
G3    289      05 lated data products
```

¹Examples are for illustrative purposes and are not specific to this STF.

Geographic Record 1—Con.

31	Blank
32	Number of implied decimals
33-80	Blank

Geographic Record 2—Field Description

Position	Description
1-2	Identifier "G2" (Geographic Record 2)
3	Blank
4-8	Begin position (right justified) (repeat from 20-24 above)
9	Blank
10-80	Field Description (left justified)

Geographic Record 3—Code Identification

Position	Description
1-2	Identifier "G3" (Geographic Record 3)
3	Blank
4-8	Begin position (right justified) (repeat from 20-24 in G1)
9	Blank
10-17	Codes (right justified)
18	Blank
19-80	Code identification (left justified)

Geographic Description Examples¹

Examples of the geographic records are shown below. In example 1, there are no G3 records. G3 records will appear only for fields which have code listings in the technical documentation.

TABLE (MATRIX) DESCRIPTION

Table Record 1—Table Number and Characteristics

Position	Description
1-2	Identifier "T1" (Table Record 1)
3	Blank
4-9	Table (matrix) number (left justified)
10	Blank
11-17	Begin position (right justified) ² (Begin position in relation to the entire record)
18	Blank
19-25	Relative begin position (right justified) ² (Begin position in relation to the record segment)
26	Blank
27-28	Cell size for this table (matrix) (right justified)
29	Blank
30	Number of implied decimals for cells in this table (matrix)
31	Blank
32-38	Number of cells in this table (matrix) (right justified) ²
39	Blank
40-42	Number of variables (right justified)
43-80	Blank

Table Record 2—Table Title

Position	Description
1-2	Identifier "T2" (Table Record 2)
3	Blank
4-9	Table (matrix) number (left justified)
10	Blank
11-80	Table (matrix) title (left justified)

Table Record 3—Universe Description

Position	Description
1-2	Identifier "T3" (Table Record 3)
3	Blank

Example 3

Sex (2) by Marital Status(5) [10]

T1 P14	4423	4423	9	0	10	2
T2 P14	SEX BY MARITAL STATUS					
T3 P14	Persons 15 years and over					
T4 P14	SEX					
T4 P14	Male					
T4 P14	Female					
T5 P14	MARITAL STATUS					
T5 P14	Never married					
T5 P14	Now married, except separated					
T5 P14	Separated					
T5 P14	Widowed					
T5 P14	Divorced					

¹Examples are for illustrative purposes and are not specific to this STF.

²These positions have been increased to accommodate all record sizes. Previous products had less characters; future products (STF 3 PR, STF 3 VI, STF 4, etc.) will have the above structure.

Table Record 3—Con.

4-9	Table (matrix) number (left justified)
10	Blank
11-80	Universe Description (left justified)

Table Record 4-N—Table Variable Descriptions

Position	Description
1-2	Identifier "Tn" n= sequence number of variable in the table being described.
3	Blank
4-9	Table (matrix) number (left justified)
10	Blank
11-76	Variable name (left justified)
77	Blank
78-80	Number of categories for this variable (right justified)
Note: Subsequent "T" records with the same "n" will have the variable categories described in positions 11-80.	

Filler Record

Position	Description
1-2	Identifier "F1" (Filler Record)
3	Blank
4-7	"FILL"
8-10	Blank
11-17	Begin Position (right justified) (Begin position in relation to the entire record) ²
18	Blank
19-25	Relative Begin Position (right justified) (Begin position in relation to the record segment) ²
26	Blank
27-30	Total number of "FILL" blanks
31-80	Blank

Matrix Example¹

See example 3 below.

APPENDIX I

Code List

STATE AND FOREIGN AREA CODES

This section contains the code list of U.S. States and territories, foreign countries, and other areas used to assign a three-digit code to the workplace reported by each person. The alphabetical list used in coding included abbreviations and alternate names, including some historical names for countries and names of States, provinces, counties, or other subdivisions of countries.

The following list does not include any of these alternate names, but does include continent and area names used as defaults if a specific country was not named but a broader region or work area was reported. The names for foreign countries shown on this list and in the publications reflect the most commonly used names in this country, not their official or legal names. Each entry shown on the following list has a unique code.

The U.S. States and territories were assigned their Federal Information Processing Standards (FIPS) code preceded by a zero. For foreign countries, codes were generally assigned by listing the countries or areas in alphabetical order (followed by default codes) within eight broad continent or regional areas: (1) Europe, (2) Asia, (3) North America, (4) Central America, (5) Caribbean, (6) South America, (7) Africa, and (8) Oceania. The entries for the USSR and the Baltic States are listed following the other entries for Europe for convenience in combining with either Europe or Asia. The entries for Germany also do not follow strict alphabetical order; codes 110-114 can be combined to tabulate an overall figure including Germany (not specified), East Germany, West Germany, and Berlin. The entries for the United Kingdom also do not follow strict alphabetical order; codes 138-145 can be combined to tabulate an overall figure including United Kingdom (not specified), England, Scotland, Wales, Northern Ireland, Guernsey, Jersey, and the Isle of Man. The codes for Asia also include a code for Korea (not specified) since it is often reported in that fashion.

001-059	United States	001-059	United States—Con.
001	Alabama	034	New Jersey
002-003	Alaska	035	New Mexico
004	Arizona	036	New York
005	Arkansas	037	North Carolina
006-007	California	038	North Dakota
008	Colorado	039	Ohio
009	Connecticut	040	Oklahoma
010	Delaware		
011	District of Columbia	041	Oregon
012	Florida	042-043	Pennsylvania
013-014	Georgia	044	Rhode Island
015	Hawaii	045	South Carolina
016	Idaho	046	South Dakota
017	Illinois	047	Tennessee
018	Indiana	048	Texas
019	Iowa	049	Utah
020	Kansas	050	Vermont
021	Kentucky	051-052	Virginia
022	Louisiana	053	Washington
023	Maine	054	West Virginia
024	Maryland	055	Wisconsin
025	Massachusetts	056-059	Wyoming
026	Michigan		
027	Minnesota	060-099	U.S. Outlying Areas and Puerto Rico
028	Mississippi		
029	Missouri	060-065	American Samoa
030	Montana	066	Guam
031	Nebraska	067-068	Johnston Atoll
032	Nevada	069-070	Northern Mariana Islands
033	New Hampshire	071	Midway Islands

060-099	U.S. Outlying Areas and Puerto Rico—Con.
072-075	Puerto Rico
076-077	Navassa Island
078	U.S. Virgin Islands
079-080	Wake Island
081-083	Baker Island
084-085	Howland Island
086-088	Jarvis Island
089-094	Kingman Reef
095	Palmyra Atoll
096-099	U.S. territory, not specified
100-199	Europe
100	Albania
101	Andorra
102	Austria
103	Belgium
104	Bulgaria
105	Czechoslovakia
106	Denmark
107	Faroe Islands
108	Finland
109	France
110	Germany, not specified
111	West Germany
112	West Berlin
113	East Berlin
114	East Germany
115	Gibraltar
116	Greece
117	Hungary
118	Iceland
119	Ireland
120	Italy
121	Jan Mayen
122	Liechtenstein
123	Luxembourg
124	Malta
125	Monaco
126	Netherlands
127	Norway
128	Poland
129	Portugal
130	Azores Islands
131	Madeira Islands
132	Romania
133	San Marino
134	Spain
135	Svalbard
136	Sweden
137	Switzerland
138	United Kingdom, not specified
139	England
140	Scotland
141	Wales
142	Northern Ireland

100-199	Europe—Con.
143	Guernsey
144	Jersey
145	Isle of Man
146	Vatican City
147	Yugoslavia
148	Europe, not specified
149	Central Europe, not specified
150	Eastern Europe, not specified
151	Lapland, not specified
152	Northern Europe, not specified
153	Southern Europe, not specified
154-179	Western Europe, not specified
180	Union of Soviet Socialist Republics (USSR)
181	Baltic States, not specified
182	Estonia
183	Latvia
184-199	Lithuania
200-299	Asia
200	Afghanistan
201	Bahrain
202	Bangladesh
203	Bhutan
204	Brunei
205	Burma
206	Cambodia
207	China
208	Cyprus
209	Hong Kong
210	India
211	Indonesia
212	Iran
213	Iraq
214	Israel
215	Japan
216	Jordan
217	Korea, not specified
218	South Korea
219	North Korea
220	Kuwait
221	Laos
222	Lebanon
223	Macau
224	Malaysia
225	Maldives
226	Mongolia
227	Nepal
228	Oman
229	Pakistan
230	Paracel Islands
231	Philippines
232	Qatar
233	Saudi Arabia
234	Singapore
235	Spratley Islands

200-299

236	Sri Lanka
237	Syria
238	Taiwan
239	Thailand
240	Turkey
241	United Arab Emirates
242	Vietnam
243	Yemen, People's Democratic Republic
244	Yemen Arab Republic
245	Asia, not specified
246	Asia Minor, not specified
247	East Asia, not specified
248	Gaza Strip
249	Indochina, not specified
250	Iraq-Saudi Arabia Neutral Zone
251	Mesopotamia, not specified
252	Middle East, not specified
253	Palestine, not specified
254	Persian Gulf States, not specified
255	Southeast Asia, not specified
256-299	West Bank

300-399**America****300-309****North America**

300	Bermuda
301	Canada
302	Greenland
303	St. Pierre and Miquelon
304-309	North America, not specified

310-329**Central America**

310	Belize
311	Costa Rica
312	El Salvador
313	Guatemala
314	Honduras
315	Mexico
316	Nicaragua
317	Panama
318-329	Central America, not specified

330-374**Caribbean**

330	Anguilla
331	Antigua and Barbuda
332	Aruba
333	Bahamas
334	Barbados
335	British Virgin Islands
336	Cayman Islands
337	Cuba
338	Dominica
339	Dominican Republic
340	Grenada
341	Guadeloupe
342	Haiti

330-374

343	Jamaica
344	Martinique
345	Montserrat
346	Netherlands Antilles
347	St. Barthelemy
348	St. Kitts-Nevis
349	St. Lucia
350	St. Vincent and the Grenadines
351	Trinidad and Tobago
352	Turks and Caicos Islands
353	Caribbean, not specified
354	Antilles, not specified
355	British West Indies, not specified
356	Latin America, not specified
357	Leeward Islands, not specified
358	West Indies, not specified
359-374	Windward Islands, not specified

375-399**South America**

375	Argentina
376	Bolivia
377	Brazil
378	Chile
379	Colombia
380	Ecuador
381	Falkland Islands
382	French Guiana
383	Guyana
384	Paraguay
385	Peru
386	Suriname
387	Uruguay
388	Venezuela
389-399	South America, not specified

400-499**Africa**

400	Algeria
401	Angola
402	Bassas da India
403	Benin
404	Botswana
405	British Indian Ocean Territory
406	Burkina Faso
407	Burundi
408	Cameroon
409	Cape Verde
410	Central African Republic
411	Chad
412	Comoros
413	Congo
414	Djibouti
415	Egypt
416	Equatorial Guinea
417	Ethiopia
418	Europa Island
419	Gabon

400-499 Africa—Con.

420 Gambia
 421 Ghana
 422 Glorioso Islands
 423 Guinea
 424 Guinea-Bissau
 425 Ivory Coast
 426 Juan de Nova Island
 427 Kenya
 428 Lesotho
 429 Liberia
 430 Libya
 431 Madagascar
 432 Malawi
 433 Mali
 434 Mauritania
 435 Mayotte
 436 Morocco
 437 Mozambique
 438 Namibia
 439 Niger
 440 Nigeria
 441 Reunion
 442 Rwanda
 443 Sao Tome and Principe
 444 Senegal
 445 Mauritius
 446 Seychelles
 447 Sierra Leone
 448 Somalia
 449 South Africa
 450 St. Helena
 451 Sudan
 452 Swaziland
 453 Tanzania
 454 Togo
 455 Tromelin Island
 456 Tunisia
 457 Uganda
 458 Western Sahara
 459 Zaire
 460 Zambia
 461 Zimbabwe
 462 Africa, not specified
 463 Central Africa, not specified
 464 Eastern Africa, not specified
 465 Equatorial Africa, not specified

400-499 Africa—Con.

466 French Equatorial Africa, not specified
 467 French West Africa, not specified
 468 North Africa, not specified
 469 Western Africa, not specified
 470-499 Southern Africa, not specified

500-553 Oceania

500 Ashmore and Cartier Islands
 501 Australia
 502 Christmas Island, Indian Ocean
 503 Clipperton Island
 504 Cocos Islands
 505 Cook Islands
 506 Coral Sea Islands
 507 Fiji
 508 French Polynesia
 509 Kiribati
 510 Marshall Islands
 511 Micronesia
 512 Nauru
 513 New Caledonia
 514 New Zealand
 515 Niue
 516 Norfolk Island
 517 Palau
 518 Papua New Guinea
 519 Pitcairn Islands
 520 Solomon Islands
 521 Tokelau
 522 Tonga
 523 Tuvalu
 524 Vanuatu
 525 Wallis and Futuna Islands
 526 Western Samoa
 527 Oceania, not specified
 528 Polynesia, not specified
 529-549 Melanesia, not specified
 550 Antarctica
 551 Bouvet Island
 552 French Southern and Antarctic Lands
 553 Heard and McDonald Islands

554-999 At Sea/Abroad, Not Specified

554 At sea
 555-999 Abroad, not specified

Summary
Tape File 420
Place of Work
20 Destinations File

TECHNICAL DOCUMENTATION

1990 Census of
Population and Housing