**An Overview:
Census 2000 and Its Data
Products**

Introduction to
Census 2000 Data Products

2000

Issued September 2000
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Highlights

*Census of
Population and
Housing Topics,* p. 1.
▪ Includes 100-percent
and sample charac-
teristics.

*Census 2000
Geographic*

Census 2000 is the largest peacetime effort in the history of the United
States. Information about the 118 million housing units and 275 million
people across the United States will be available in a variety of formats and
media, including the Internet, CD-ROMs, DVDs, and printed reports. This
brochure provides a brief introduction to the information available from
Census 2000, Census 2000 geography, maps, and data products. Visit our
Web site at *http://www.census.gov* for more information.

**Information Available From the 22nd Census
of Population and Housing**

United States
Census
2000

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Updated 9/4/2003   [Slide background format updated 2/2/04]

*Note to Readers: This presentation is one that is given as a part of a workshop. It
is an overview of changes to the questionnaire from 1990, the data products for
Census 2000, and the media on which it will be released (e.g., Internet, DVD or
CD-ROM, paper).*

This is the one hands-OFF presentation where you get lectured to, in the
old fashioned way!

Today we'll look at the Census 2000, changes to some questions, and
the products.

We're going to jump into one of the biggest changes right away – the
race and ethnicity questions and how they affected Census 2000.

100% Data or Short Form

- Name
- Sex
- Race
- Household Relationship
- Age
- Tenure
- Hispanic/Latino Origin

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The Census Bureau used two different forms to collect Census 2000 data.

A short form with seven basic questions went to all households.

The information that is tabulated from the questions asked of every person and housing unit is called the 100-percent or short-form data.

Sample Data *or* Long Form

Sample characteristics (long form): Additional questions were asked of a sample (generally 1-in-6) of persons and housing units. Data are provided on:

Population
Marital status
Place of birth, citizenship, and
  year of entry
School enrollment and
  educational attainment
Ancestry
Migration (residence in 1995)
Language spoken at home and
  ability to speak English
Veteran status
Disability
Grandparents as caregivers
Labor force status
Place of work and journey to work
Occupation, industry, and class of worker
Work status in 1999
Income in 1999

Housing
Value of home or monthly rent paid
Units in structure
Year structure built
Number of rooms and number
  of bedrooms
Year moved into residence
Plumbing and kitchen facilities
Telephone service
Vehicles available
Heating fuel
Farm residence
Utilities, mortgage, taxes,
  insurance, and fuel costs

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A long form questionnaire with these same 7 questions and an additional questions went to a sample of households. Because it went to a sampling of households, it is often called the sample data, or the long-form data.

To collect the long form data, Census 2000 implemented a variable rate sampling plan. Use of variable sampling rates provide relatively more reliable estimates for small areas and decreases respondent burden in more densely populated areas while maintaining data reliability.

This rate varied from 1 in 2 housing units in some smaller areas, to 1 in 8 for more densely populated areas.

The overall sampling rate is 1-in-6 housing units, or 17%.

Census 2000:
Hispanic or Latino

In 1990 the Hispanic Origin question was question #7, and race was question #4.

For Census 2000, the Hispanic origin question was moved up to be asked immediately before the question on race. While that seems like a simple change, simply having the two questions together makes a difference in responses.

For the question on race, respondents selected one or more races, and filled in the race category - or categories - that best described them.

For the 1990 Census, the category was "Asian and Pacific Islander."   For Census 2000 this was split into two categories:

> Asian, and

> Native Hawaiian and Other Pacific Islander

The result is that there are now 6 major race categories:

• White

• Black or African American

• American Indian and Alaska Native

• Asian

• Native Hawaiian and Other Pacific Islander

• Some other race

Write-in entries such as multi-racial, mixes, interracial, or a Hispanic or Latino group are included in the "some other race" category.

43 percent of Hispanics or Latinos classified themselves as "Some Other Race"

97 percent of people who reported as "Some Other Race" were Hispanic or Latino.

Note: As part of Federal guidelines on collecting and presenting data on race, the Federal Office of Management and Budget requires agencies to use a minimum of five categories; White, Black or

Race and Ethnicity Tabulation Categories

- One Race
- Two or more races
- Race alone or in combination

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The change in the question results in 3 broad categories for race, reflected on this slide.

One race is straight-forward. You have each of the 6 groups reflecting people who chose only one race category. For example, White alone, Asian alone, Some other race alone.

Two or more races refers to people who chose more than one of the six race categories. For example, White *and* Black or African American, or, American Indian & Alaska Native *and* Asian. (The Census Brief *Two or more Races Population: 2000* <http://www.census.gov/prod/2001pubs/c2kbr01-6.pdf> has additional information).

The third category, race alone or in combination has each of the 6 major groups listed *alone or in combination* (with another race group). For example, White alone or in combination is the number of people who selected "white" and one or more additional races. This category captures anyone who selected a particular race as part of their answer.

Race and Ethnicity Tabulations

Race							Two or more races		
	One race								
Total population	White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Some other race	Number	Percent of total population	Two races excluding Some other race, and three or more races
1 211 537	294 102	22 003	3 535	503 868	113 539	15 147	259 343	21.4	243 136

Table P3 (Hawaii) showing one race, and two or more races

Selected combinations of two races				Race alone or in combination with one or more other races					
White; Black or African American	White; American Indian and Alaska Native	White; Asian	Black or African American; American Indian and Alaska Native	White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Some other race
2 289	5 953	55 028	645	476 162	33 343	24 882	703 232	282 667	47 603

Table P5 (Hawaii) showing combinations of two races and the 3rd category, race alone or in combination

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The tables shown here are from PHC-1, *Summary Population and Housing Characteristics, Hawaii.* The top table shows the first two categories – "One race," and "Two or more races."

The second table shows "Selected combinations of two races," and the "Race alone or in combination with one or more races." All of the numbers shown are for the *state*, so you can take a look at how the numbers change when using the different categories.

Users need to consider the type of information they need, and then choose the data that best fills the need.

On the long form, there is one new item -- as required by the welfare reform act--concerning grandparents as caregivers.

The question asks whether there are any grandchildren under 18 living in the house, whether the grandparent is responsible for most of the basic needs of any of the grandchildren who live in the house, and how long the grandparent has been responsible for these grandchildren.

Note: The question asks the question about the grandchild for whom the grandparent has been responsible for the longest period of time if there are grandchildren who have been in the household for different time periods.

The question on disability has been expanded to cover vision and hearing impairment, and disabilities associated with learning and remembering.

This is in addition to the 1990 questions on work and mobility disability and the need for assistance with every day activities.

Census 2000 Data

100% data or short-form information
- Redistricting Summary File
- Summary File 1
- Summary File 2

Sample data or long-form information
- Summary File 3
- Summary File 4
- Public Use Microdata Sample (PUMS)

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Now that we've reviewed some of the changes to the questions, what about the data and data products?

Census 2000 information is released in a series of summary files. The summary files are basically a set of predefined tables for various levels of geography.

Information from the short-form questions (100% data) is released first. Short-form information is included in the Redistricting Summary File, and Summary Files 1 and 2. Long-form information is included in Summary Files 3 and 4 and the Microdata files.

Redistricting Summary File

- Total population and 18-and-over population by 63 race categories and Hispanic/Latino
- Lowest level of geography: block
- 1 or more CD-ROMs per state; 3 DVDs
- Race and Hispanic or Latino Summary File (National File)

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One of the first products released was the Redistricting Summary File sometimes called the PL 94-171 data. This is used by states to redraw legislative district boundaries. The Redistricting File contains combinations of the race data down to the census block level.

Because of the new Federal guidelines for how data on race should be collected and tabulated, people could check as many of the racial categories as they felt necessary to identify themselves on the census questionnaire.

As a result, some of the race tabulations are extensive.   This file contains tables down to the block level showing the total population and the population 18-and-over for 63 race categories (combinations of the 6 major race categories) and for the Hispanic or Latino population.

The file is available on the Internet and on CD-ROM.

100% Summary Files

Summary File 1 (SF1)

- 286 tables
- Counts and cross tabulations
- Counts for detailed race, Hispanic or Latino groups, and American Indian/Alaska Native tribes (to the census tract)
- Tables repeat for major race groups alone; two or more races; Hispanic or Latino; White alone, not Hispanic or Latino
- Geography: block, census tract

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Summary File 1 provides various counts and some cross-tabulations of the data collected from every person and housing unit in 286 tables.

Information is available down to the block level as well as for other geographic levels including ZIP Code Tabulation Areas and Congressional districts.

Some tables are available only at the census tract level (e.g., counts for detailed race groups in the PCT tables).

Median age, household size, tenure by age of householder, group quarters population, etc. are some of the data items available in this file.

100% SF1 Subject Content

– 171 Population tables (P) at block
          level
–   56 Housing tables (H) at block level
–   59 Population tables (PCT) at
          census tract level

286 Tables

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There is a total of 171 Population tables (identified with a "P") and 56 Housing tables (identified with an "H") shown down to the block level. And, there are 59 population tables to the census tract level (identified with a "PCT") for a total of 286 tables.

Finally, SF 1 includes population and housing characteristics for the total population. SF 1 also has population *totals* for an extensive list of race (American Indian and Alaska Native tribes, Asian, and Native Hawaiian and Other Pacific Islander categories) and Hispanic or Latino groups, and population and housing characteristics for the major race groups and Hispanic or Latino origin. These are in the PCT tables.

Examples of SF1 Tabulations

P1   Total population (1)
P3   Race (71)
P8   Hispanic or Latino (17)
P12   Sex by age (5-year groupings) (49)
P14   Sex by age for the population
      under 20 (single years of age) (43)
P15   Households (1)
P17   Average household size (1)

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Here you see examples of the kinds of tabulations available in SF1.

The number in parentheses after the table name indicates how many data cells there are in each table.

For example, Table P1 provides the total population count for the geographic area. Table P3 provides population counts by 71 single or multiple race categories – 71 data cells.

Table P8 shows the number of persons that indicated Hispanic or Latino origin by 7 race categories etc.,

SF2 Subject Content

36 Population tables at census tract (PCT) level

11 Housing tables at census tract (HCT)

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Summary File 2 presents 100% data in 36 population tables (matrices) identified with "PCT" and 11 housing tables identified with "HCT." The extension "CT" indicates the data is released to the Census Tract level.

Depending on the media used, you select the group – one of the 250 race, Hispanic or Latino origin groups, or American Indian and Alaska Native tribes either first, or later in the process.

SF2 Racial/Ethnic Groups

- 70 American Indian tribal groupings
- 8 Alaska Native tribal groupings
- 38 Asian categories
- 20 Native Hawaiian and Other Pacific Islander categories
- 25 Hispanic or Latino categories
- 14 Not Hispanic or Latino categories

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There are 70 detailed American Indian tribes, 8 detailed Alaska Native tribes, 38 detailed Asian categories, 20 detailed Native Hawaiian and Other Pacific Islander categories, 25 detailed Hispanic or Latino groups and 14 Not Hispanic or Latino groups (e.g., White alone, White alone or in combination with one or more other races, Black alone, Black alone or in combination.with one or more other races, etc.).

The groups can be shown as one race or tribe, or as race alone or in any combination. E.g. Aleut alone *AND* Aleut alone or in any combination

A population threshold of 100 was set for SF2. The matrices on this file are shown only if the population of the race/American Indian or Alaska Native tribe/Hispanic group/Asian, Native Hawaiian and other Pacific Islander, etc. in a particular geographic area is 100 or more. If the population threshold of 100 is met, data are included for the entire set of matrices.

Some SF2 Subjects

- PCT1   Total population (1)
- PCT3   Sex by age (209)
- PCT4   Median age by sex (3)
- PCT7   Population in household (1)
- PCT9   Household size, household type and presence of own children (19)
- HCT2   Tenure (3)
- HCT3   Total population in occupied housing units (1)
- HCT4   Total population in occupied housing units by tenure (3)

Here are some examples of the 36 tabulations available in Summary File 2.

PCT1 provides the total population count for the geographic area.

PCT3 provides population counts for sex by age in single years of age up to 99 years, thereafter by 5-year groupings. 110 years and over is the upper limit.

PCT4 shows the median age by sex for both male and female.

PCT7 shows population in households.

PCT9 looks at household size, household type and presence of own children.

etc.

When looking at the tables, an important item to note is what the "universe" consists of. *The Universe is the total number of units, e.g., individuals, households, in the population of interest.*   PCT 1, 3, and 4 have a universe of Total Population. The universe for PCT 5 and 7 is Population in Households, and the universe for PCT 8 and 9 is Households. HCT2 has a universe of occupied housing units, and HCT 3 and 4 have a universe of population in occupied housing units.

Sample Data Summary Files

Summary File 3

- 813 tables of data

- Counts and cross tabulations of sample items (income, occupation, education, rent and value, vehicles available)

- Lowest level of geography: block group

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Summary File 3 looks at the sample data. Sample data comes from the long-form questionnaire – the 1 in 6 housing units sample.

SF3 is has data on income, occupation, journey to work, and housing finance and home characteristics. There are 813 data tables in this file, identifying areas as small as block groups. Of the 813 tables, 484 are population tables and 329 are housing tables. Some tables are available only at the census tract level. These are identified as PCT or HCT tables.

For a review of the SF3 tables and content, you may want to review the presentation at:
http://www.census.gov/mso/www/pres_lib/sf3_files/v3_document.htm

SF3 Information

Using the search capabilities of the software, users can search the technical documentation for tables with specific information (e.g. household language by linguistic isolation), for definitions of terms and geography, and more.

Summary File 3   2000
2000 Census of Population and Housing
Issued November 2002
SF3/07 (RV)
Technical Documentation

http://www.census.gov/prod/cen2000/doc/sf3.pdf
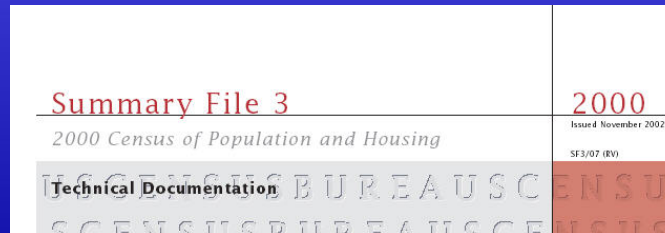
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Each data set also has technical documentation. Depending on the complexity of the data, they may be larger or smaller. Using the adobe acrobat search functions (the binoculars icon) it is possible to search the technical documentation for individual terms and find out where they occur in the data set, or to look for definitions of the term.

Definitions of subject terms include information on which question the information comes from, and how answers were interpreted.

Sample Data Summary Files

Summary File 4

Tables repeated by race, Hispanic/ Latino, and American Indian and Alaska Native tribes, *and* ancestry – 336 categories in all.

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Comparable in structure to Summary File 2, Summary File 4 will contains sample data tables for total population. and detailed race and Hispanic or Latino groups, American Indian and Alaska Native tribes, and includes an additional 86 ancestry groups for 336 categories in all.

Data is released to the census tract, subject to the population threshold.

Tables for any population group excluded from SF 2 because the group's total population in a specific geographic area did not meet the SF 2 threshold of 100 people are excluded from SF 4.

In addition, all tables are shown for any of the above population groups only if there are at least 50 unweighted sample cases in a specific geographic area. For the ancestry iterations, only the 50 unweighted sample cases test can be performed.

There are also repeating tabulations for selected population and housing subjects.

The example shown is from SF1, but SF3 also has repeating tabulations for the same groupings. This example, Table P12, sex by age, is tabulated by male and female and by age groups (5 to 9 years; 10 to 14 years, etc.).

The same table is then repeated – iterated – for 9 race and Hispanic or Latino groups in Tables P12A through P12 I

You can see White alone, Black or African American alone, and so on.

Investigation of the data set, or the Technical Documentation for SF1 shows you there are 14 P tables that repeat – P12, 13, 15, 16, 17, 26, 27, 28, 30, 31, 32, 33, 34, and 35; there are 4 PCT tables that repeat: 12, 13, 15, and 17; and there are 4 H tables that repeat: H11, 12, 15, and 16. Repeating tabulations in other data sets follow the same format of using a letter, a number, and a letter (e.g. P15A, H23B).

Public Use Microdata Sample (PUMS) Files

PUMS are unaggregated responses to Census 2000 with all identifying information removed

– 1-Percent Files (nation and states, as well as sub-state areas where appropriate)

– 5-Percent Files (information for states and substate areas)

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Researchers who want to do their own cross-tabulations of census information, can use a set of data known as the Public Use Microdata Sample Files.

These files are the actual responses to the census questionnaire (in electronic format) but with all identifying information removed.

There will be 2 sets of microdata files and both contain the full-range of characteristics from the questionnaire. All states will be identified on the file.

The 1 percent files has a minimum geographic population threshold of 400,000. A threshold will be used for category variables with race and Hispanic origin.

5 percent PUMS files will provide geographies representing many metropolitan areas, cities, and more populous counties, as well as groups of less populous counties. In order to protect confidentiality, characteristic information for these smaller areas will be less detailed than in the national 1 percent file. The population threshold is 100,000, and some variables may not be shown if there are less than 10,000 persons in the country with that characteristic. In this case some of the categories may be collapsed.

Release of Census 2000 Products

- December 31, 2000 -- Official State counts
- April 1, 2001-- Redistricting counts
- 2001-- Short-form (100%) data products
- 2002-2003 -- Long-form (sample) data products

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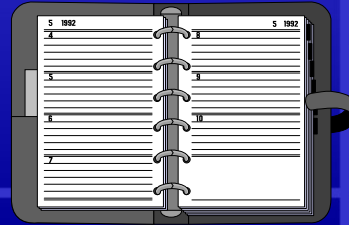
With Census Day several years behind us, we're getting near the end of the stream of products from the information gathered on that day.

The first product, mandated by Congress for delivery by a specific date, was the official state counts used for reapportionment of the Congressional seats. These were delivered to the President before end of 2000. These data are the ones that are used to allocate the total 435 Congressional seats among the states, based on their population. Redistricting counts are used to change congressional district boundaries within a state.

The first products, the 100% data, are all available now, as are the sample data.

Media

- Internet

- CD-ROM /DVD

- Paper

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The information is available in a variety of media, including Internet, disc, and print, including print-on-demand and publications. And, depending on the specific product, it will likely be available in several different electronic formats.

We released most Census 2000 information first via the internet on a flow basis. That is, several states one week, another group the next week.

A short time later, the information will also be released on a CD-ROM and once all states in a series are released, we will issue the product on DVD.

There will also be a variety of products available on paper, including printed publications, and maps. We also have print-on demand capabilities available for users who need an official printed copy.

Internet

- Data released first on American FactFinder

- Printed reports and Maps available in Portable Document Format (PDF)

- Download (FTP) options available at http://ftp2.census.gov

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Data is released first on the Internet through the Census Bureau's access tool called the American FactFinder (though this is not going to be true for the PUMS files). The data sets are also listed on the Census 2000 Gateway page.

Many key tables will be available in printed reports and we will also make these printed reports available in portable document format (PDF) on the internet, and on CD-ROM/DVD-ROM. Maps will be accessible in PDF format on CD-ROM and on the Internet.

Users will be able to download files directly from our Internet site, and researchers requiring lots of data may consider the CD-ROM and DVD as an alternative. Given the size of some of the files, and modem speeds, the downloading process could literally take several days for some users.

This is the Census 2000 Gateway. It provides links to all elements for
Census 2000 – from the questionnaire and press releases, to link to the
data and to PDF versions of publications, and maps.
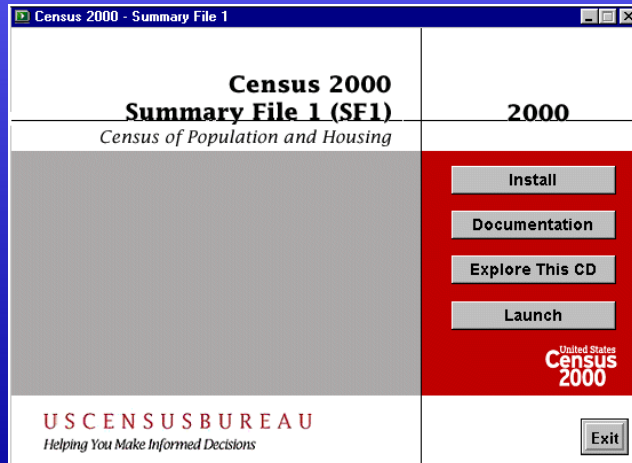
Census 2000 Summary File data are released first on the American FactFinder and then on CD-ROM and/or DVD. The Census Bureau recommends purchasing a CD-ROM if downloads larger than 3-5 megabytes of data will be needed.

So far SF1, 2 and 3 have been released on DVD. The DVD's contain data for the entire country. SF3 DVD is a 2-disc set.

You'll learn more about this software later today.

CD-ROM / DVD

- Redistricting Summary File
- Summary File 1 through Summary File 4
- Access software is included
- Maps (PDF)

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We are releasing various files on CD-ROM, just as we did in 1990. These will be released on a state-by-state basis; once all the states in a particular series are released, we will repackage the entire series on a one or more DVDs.

Which ever you have, CD-ROM or DVD, includes various related products such as demographic profiles, and the technical documentation.

The complete set of block maps and tract outline maps will also be available on DVD. The Census Tract Outline Maps DVD came out in September 2002. There will be a total of 6 DVDs with Block Maps, and about half have been released so far.

Paper

- Printed reports
    - Summary Population and Housing Characteristics
    - Summary Social, Economic and Housing Characteristics
    - Population and Housing Unit Counts
    - Census Briefs
    - Census 2000 Special Reports
- Maps
- Print on demand

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Even though there will be much information available in electronic media, we will also produce paper products. These include 3 series of printed reports, as well as a series of short informational briefs.

The first series, *PHC-1, Summary Population and Housing Characteristics*, contains tabulations of 100-percent data and is currently being released.

The second series, the *PHC-2, Summary Social, Economic and Housing Characteristics* will contain sample data for each of the governmental units in the state.

The third series, *PHC-3, Population and Housing Unit Counts* presents population and housing unit counts for governmental units for 1980, 1990, and 2000. About half the states have been released so far.

The Census Briefs present a short analysis, generally at the national level, of most of the specific topics that were asked in the census, such as gender, housing, household relationship, population distribution and include briefs for specific race groups. A new series of briefs, based on the sample data, is being released.

As we did in 1990, the Bureau will produce printed maps on demand. There will also be several thematic or data maps that will be printed through the Government Printing Office. And the Census Bureau is offering print on demand for those users who may need a printed version of a product that is only available in electronic format.

Cost of Census 2000 Products

- Most information free through the Internet (www.census.gov)

- Charges for detailed custom tabulations, CD-ROMs, printed reports, print on-demand

- Census Bureau's Customer Service Center (301-763-INFO)

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Most of the information is available on the internet, however if you want something printed, or want to purchase a CD-ROM, you can call the Census Bureau's Customer Service Center at 301-763-4636.

Other Sources of Census 2000 Information

State Data Centers

Census Information Centers

Depository Libraries

Census Bureau Regional Offices

www.census.gov/dmd/www/groupcnr.html

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Locally, you can also review Census data products or get assistance in using them through any one of about 2,000 state, local and regional agencies and organizations; and community and non-profit groups participating in our various data center programs.

Over 1,300 public and academic libraries also have copies of Census Bureau products through the Federal Depository Library program.

Our 12 regional offices around the country are another source of local assistance.

A listing of these various organizations can be found on our website.

For More Information

Subscribe to the Census Product Update:

www.census.gov/mp/www/cpu.html

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You can also keep up with new developments by by subscribing to the Census Product Update. It is a biweekly, e-mailed, listing of recently released and upcoming data products from the U.S. Census Bureau.   It also gives helpful hints for AFF and information about new features. It's a very useful electronic publication.

Older issues are available via the URL, above, as well as the current issue.

Be sure to review the *Introduction to Census 2000 Data Products* <http://www.census.gov/prod/2001pubs/mso-01icdp.pdf> . This brochure provides information on the data products that are projected to be available from Census 2000, information to help you understand census geography, and a description of the various Census 2000 data products.